65 70 75 80 Gly Ile Pro Ala Ile Val Lys Leu Leu Asn Gln Pro Asn Gln Trp Pro 90 Leu Val Lys Ala Thr Ile Gly Leu Ile Arg Asn Leu Ala Leu Cys Pro 105 Ala Asn His Ala Pro Leu Gln Glu Ala Ala Val Ile Pro Arg Leu Val 120 Gln Leu Leu Val Lys Ala His Gln Asp Ala Gln Arg His Val Ala Ala Gly Thr Gln Gln Pro Tyr Thr Asp Gly Val Arg Met Glu Glu Ile Val Glu Gly Cys Thr Gly Ala Leu His Ile Leu Ala Arg Asp Pro Met Asn 165 170 Arg Met Glu Ile Phe Arg Leu Asn Thr Ile Pro Leu Phe Val Gln Leu 185 Leu Tyr Ser Ser Val Glu Asn Ile Gln Arg Val Ala Ala Gly Val Leu 195 200 Cys Glu Leu Ala Gln Asp Lys Glu Ala Ala Asp Ala Ile Asp Ala Glu 215 220 Gly Ala Ser Ala Pro Leu Met Glu Leu Leu His Ser Arg Asn Glu Gly 230 235 Thr Ala Thr Tyr Ala Ala Ala Val Leu Phe Arg Ile Ser Glu Asp Lys 245 250 Asn Pro Asp Tyr Arg Lys Arg Val Ser Val Glu Leu Thr Asn Ser Leu Phe Lys His Asp Pro Ala Ala Trp Glu Ala Ala Gln Ser Met Ile Pro 275 280 Ile Asn Glu Pro Tyr Gly Asp Asp Xaa Asp Ala Thr Tyr Arg Pro Met 290 295 Tyr Ser Ser Asp Val Pro Leu Asp Pro Leu Glu Met His Met Asp Met Asp Gly Asp Tyr Pro Ile Asp Thr Tyr Ser Asp Gly Leu Arg Pro Pro

Tyr Pro Thr Ala Asp His Met Leu Ala

340 345

<210> 1389

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1389

Ser Leu Ile Cys Tyr Val Gln Ser Leu Lys Ala Thr Thr His Phe Phe 1 5 10 15

Xaa Lys Val Asp Ala Phe Ser Ala Val Leu Glu Ser Val Phe Cys Phe 20 25 30

Trp Gln Glu Ser Cys Lys Leu Cys Ile Leu Lys Gln Met Gln Lys Val

Val Leu Cys Lys Thr Phe Val Phe Cys Leu Ser Gln Ile Asn Ile Leu 50 55 60

<210> 1390

<211> 371

<212> PRT

<213> Homo sapiens

<400> 1390

Pro Pro Arg Ala Leu Gly Ser Val Ala Met Glu Asn Gln Val Leu Thr
1 5 10 15

Pro His Val Tyr Trp Ala Gln Arg His Arg Glu Leu Tyr Leu Arg Val 20 25 30

Glu Leu Ser Asp Val Gln Asn Pro Ala Ile Ser Ile Thr Glu Asn Val 35 40 45

Leu His Phe Lys Ala Gln Gly His Gly Ala Lys Gly Asp Asn Val Tyr $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60 \hspace{1.5cm}$

Glu Phe His Leu Glu Phe Leu Asp Leu Val Lys Pro Glu Pro Val Tyr

65					70					75					80
Lys	Leu	Thr	Gln	Arg 85		Val	Asn	Ile	Thr 90	Val	Gln	Lys	Lys	Val 95	Ser
Gln	Trp	Trp	Glu 100	Arg	Leu	Thr	Lys	Gln 105	Glu	Lys	Arg	Pro	Leu 110	Phe	Leu
Ala	Pro	Asp 115	Phe	Asp	Arg	Trp	Leu 120	Asp	Glu	Ser	Asp	Ala 125	Glu	Met	Glu
Leu	Arg 130	Ala	Lys	Glu	Glu	Glu 135	Arg	Leu	Asn	Lys	Leu 140	Arg	Leu	Glu	Ser
Glu 145	Gly	Ser	Pro	Glu	Thr 150	Leu	Thr	Asn	Leu	Arg 155	Lys	Gly	Tyr	Leu	Phe 160
Met	Tyr	Asn	Leu	Val 165	Gln	Phe	Leu	Gly	Phe 170	Ser	Trp	Ile	Phe	Val 175	Asn
Leu	Thr	Val	Arg 180	Phe	Cys	Ile	Leu	Gly 185	Lys	Glu	Ser	Phe	Туг 190	Asp	Thr
Phe	His	Thr 195	Val	Ala	Asp	Met	Met 200	Tyr	Phe	Cys	Gln	Met 205	Leu	Ala	Val
Val	Glu 210	Thr	Ile	Asn	Ala	Ala 215	Ile	Gly	Val	Thr	Thr 220	Ser	Pro	Val	Leu
Pro 225	Ser	Leu	Ile	Gln	Leu 230	Leu	Gly	Arg	Asn	Phe 235	Ile	Leu	Phe	Ile	Ile 240
Phe	Gly	Thr	Met	Glu 245	Glu	Met	Gln	Asn	Lys 250	Ala	Val	Val	Phe	Phe 255	Val
Phe	Tyr	Leu	Trp 260	Ser	Ala	Ile	Glu	11e 265	Phe	Arg	Tyr	Ser	Phe 270	Tyr	Met
Leu	Thr	Cys 275	Ile	Asp	Met	Asp	Trp 280	Lys	Val	Leu	Thr	Trp 285	Leu	Arg	Tyr
Thr	Leu 290	Trp	Ile	Pro	Leu	Tyr 295	Pro	Leu	Gly	Cys	Leu 300	Ala	Glu	Ala	Val
Ser 305	Val.	Ile	Gln	Ser	Ile 310	Pro	Ile	Phe	Asn	Glu 315	Thr	Gly	Arg	Phe	Ser 320
Phe	Thr	Leu	Pro	туг 325	Pro	Val	Lys	Ile	Lys 330	Val	Arg	Phe	Ser	Phe 335	Phe
Leu	Gln	Ile	Tyr	Leu	Ile	Met	Ile	Phe	Leu	Gly	Leu	Tyr	Ile	Asn	Phe

340 345 350

Arg His Leu Tyr Lys Gln Arg Arg Arg Tyr Gly Gln Lys Lys 355 360 365

Lys Ile His 370

<210> 1391

<211> 365

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1391

Ala Glu Val Asn Thr Val Lys Tyr Leu Lys Pro Ser Thr Ser Gln Ile
1 5 10 15

Met Lys Lys Leu Leu Lys Phe Ser Ser Gln Xaa Lys Lys Lys 20 25 30

Ile Lys Arg Glu Ile Lys Ile Leu Glu Asn Leu Arg Gly Gly Pro Asn 35 40 45

Ile Ile Thr Leu Ala Asp Ile Val Lys Asp Pro Val Ser Arg Thr Pro 50 55 60

Ala Leu Val Phe Glu His Val Asn Asn Thr Asp Phe Lys Gln Leu Tyr 65 70 75 80

Gln Thr Leu Thr Asp Tyr Asp Ile Arg Phe Tyr Met Tyr Glu Ile Leu 85 90 95

Lys Ala Leu Asp Tyr Cys His Ser Met Gly Ile Met His Arg Asp Val 100 105 110

Lys Pro His Asn Val Met Ile Asp His Glu His Arg Lys Leu Arg Leu 115 120 125

Ile Asp Trp Gly Leu Ala Glu Phe Tyr His Pro Gly Gln Glu Tyr Asn 130 135 140

Val Arg Val Ala Ser Arg Tyr Phe Lys Gly Pro Glu Leu Leu Val Asp 145 150 155 160

Tyr	Gln	Met	Tyr	Asp 165	Tyr	Ser	Leu	Asp	Met 170	Trp	Ser	Leu	Gly	Cys 175	Met
Leu	Ala	Ser	Met 180	Ile	Phe	Arg	Lys	Glu 185	Pro	Phe	Phe	His	Gly 190	His	Asp
Asn	туг	Asp 195	Gln	Leu	Val	Arg	11e 200	Ala	Lys	Val	Leu	Gly 205	Thr	Glu	Asp
Leu	Tyr 210	Asp	туг	Ile	Asp	Lys 215	Tyr	Asn	Ile	Glu	Leu 220	Asp	Pro	Arg	Phe
Asn 225	Asp	Ile	Leu	Gly	Arg 230	His	Ser	Arg	Lys	Arg 235	Trp	Glu	Arg	Phe	Val 240
His	Ser	Glu	Asn	Gln 245	His	Leu	Val	Ser	Pro 250	Glu	Ala	Leu	Asp	Phe 255	Leu
Asp	Lys	Leu	Leu 260	Arg	Tyr	Asp	His	Gln 265	Ser	Arg	Leu	Thr	Ala 270	Arg	Glu
Ala	Met	Glu 275	His	Pro	Tyr	Phe	Tyr 280	Thr	Val	Val	Lys	Asp 285	Gln	Ala	Arg
Met	Gly 290	Ser	Ser	Ser	Met	Pro 295	Gly	Gly	Ser	Thr	Pro 300	Val	Ser	Ser	Ala
Asn 305	Met	Met	Ser	Gly	Ile 310	Ser	Ser	Val	Pro	Thr 315	Pro	Ser	Pro	Leu	Gly 320
Pro	Leu	Ala	Gly	Ser 325	Pro	Val	Ile	Ala	Ala 330	Ala	Asn	Pro	Leu	Gly 335	Met
Pro	Val	Gln	Leu 340	Pro	Leu	Ala	Leu	Ser 345	Ser	Asn	Gly	Pro	Ile 350	Cys	Leu
Leu	Met	Pro 355	Glu	Gln	Arg	Trp	Gly 360	Ser	Pro	Pro	Ser	Pro 365			

<210> 1392

<211> 276

<212> PRT

<213> Homo sapiens

<400> 1392

Thr Met Ala Ala Ser Asp Thr Glu Arg Asp Gly Leu Ala Pro Glu Lys $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Thr Ser Pro Asp Arg Asp Lys Lys Glu Gln Ser Glu Val Ser Val

20 25 30

Ser Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser 35 40 45

Arg Glu Arg Lys Arg Lys Ser Asp Asp Glu Gly Arg Lys His Arg Ser

Arg Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser 50 60

Arg Ser Arg Ser Lys Glu Gly Arg Arg His Glu Ser Lys Asp Lys Ser 65 70 75 80

Ser Lys Lys His Lys Ser Glu Glu His Asn Asp Lys Glu His Ser Ser 85 90 95

Asp Lys Gly Arg Glu Arg Leu Asn Ser Ser Glu Asn Gly Glu Asp Arg 100 105 110

His Lys Arg Lys Glu Arg Lys Ser Ser Arg Gly Arg Ser His Ser Arg 115 120 125

Ser Arg Ser Arg Glu Arg Arg His Arg Ser Arg Ser Arg Glu Arg Lys 130 135 140

Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser 145 150 155 160

Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg Arg
165 170 175

Ile Arg Ser Arg Ser Arg Ser Arg His Arg His Arg Thr Arg
180 185 190

Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Asp Arg Lys Lys Arg Ile 195 200 205

Glu Lys Pro Arg Arg Phe Ser Arg Ser Leu Ser Arg Thr Pro Ser Pro 210 215 220

Pro Pro Phe Arg Gly Arg Asn Thr Ala Met Asp Ala Gln Glu Ala Leu 225 230 235 240

Ala Arg Arg Glu Arg Pro Gly Val Ser Leu Ile Val Cys Pro Gly Trp
245 250 255

Val Thr Gln Cys Asn Leu Met Leu Leu Pro Leu Gly Thr Gln Pro Asp 260 265 270

Arg Lys Leu Gln 275

```
<210> 1393
<211> 180
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (172)
<223> Kaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (180)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1393
Ala Arg Arg Xaa Val Val Ile Thr Ser Lys Ser Gly Glu Ile Leu Tyr
                                     10
Arg Ile Ser Pro Trp Ala Lys Tyr Val Val Arg Glu Gly Asp Asn Val
Asn Tyr Asp Trp Ile His Trp Asp Pro Glu His Ser Tyr Glu Phe Lys
                             40
His Ser Arg Pro Lys Lys Pro Arg Ser Leu Arg Ile Tyr Glu Ser His
    50
                         55
Val Gly Ile Ser Ser His Glu Gly Lys Val Ala Ser Tyr Lys His Phe
                     70
Thr Cys Asn Val Leu Pro Arg Ile Lys Gly Leu Gly Tyr Asn Cys Ile
Gln Leu Met Ala Ile Met Glu His Ala Tyr Tyr Ala Ser Phe Gly Tyr
           100
                                                    110
Gln Ile Thr Ser Phe Phe Ala Ala Ser Ser Arg Tyr Gly Thr Pro Glu
       115
                            120
                                                125
```

Glu Leu Gln Glu Leu Val Asp Thr Ala His Xaa Met Gly Ile Ile Val 130 135 140

Leu Leu Asp Val Val Gln Ala His Ala Ser Lys Asn Ser Ser Arg Trp 145 150 155 160

Asp Trp Asn Met Val Trp Met Gly Asp Arg Phe Xaa Val Asn Phe Pro 165 170 175

Phe Leu Gly Xaa 180

<210> 1394

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1394

Ile Leu Thr Tyr Lys Glu Thr Gly Pro Gln Thr Gly Asn Ser Leu Val

1 5 10 15

Gln Ala Ser Ala Arg Arg Lys Asp Thr Met Thr Ala Pro Cys Trp Ala $20 \hspace{1cm} 25 \hspace{1cm} 30$

Gln Pro Gly Ser Leu Ala Lys Cys Leu Leu Glu Ala Val Pro Ala Arg 35 40 45

Gly Leu Gln Gly Asp Ser Leu Pro Ser Gly His Tyr Gln Tyr Xaa
50 55 60

Leu Tyr Leu Glu Val Gly Lys Arg Ser Pro Leu Arg Gln Gln Asp Asn 65 70 75 80

Gly Gln Phe Arg Glu Gly Glu Gly Ser Lys Arg Phe Arg Gly His Arg 85 90 95

Ser Gln Arg Thr Pro Pro Arg Pro Thr Ala Gly Ser Ala Trp Lys Ile 100 105 110

His Leu Leu Gly Thr Phe Trp Gln Pro Asp Gly Ser Asn Ser Pro Leu 115 120 125

Gly Leu Ile Pro Ser Ser Lys Ser Trp Leu Gln Met Ser Leu Ser Ser 130 135 140

Pro Tyr Trp Arg Ala Pro Pro Asp Ser Trp Ala Gln Phe Ile Ser Ser 145 150 155 160

Pro Phe

<210> 1395

<211> 416

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (412)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (413)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1395

Gln Leu Asp Gly Val Gly Leu Glu Ser Arg Ser Pro Gly Cys Ser Thr
1 5 10 15

Trp Glu Lys Ala Asp Arg Val Arg Gly Pro Val Ala Gln Arg Ala Val 20 25 30

Ala Ser Gly Ser Gly Lys Trp Arg Gln Glu Pro Ser Leu His Phe Ala 35 40 45

Met Ser Phe Leu Ile Asp Ser Ser Ile Met Ile Thr Ser Gln Ile Leu 50 55 60

Phe Phe Gly Phe Gly Trp Leu Phe Phe Met Arg Gln Leu Phe Lys Asp 65 70 75 80

Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser Val Thr Phe
85 90 95

Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe Glu Ile Leu Gly 100 105 110

Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp Lys Met Asn Leu Cys 115 120 125

Val Ile Leu Leu Ile Leu Val Phe Met Val Pro Phe Tyr Ile Gly Tyr 130 135 140

Phe 145	Ile	Val	Ser	Asn	Ile 150	Arg	Leu	Leu	His	Lys 155	Gln	Arg	Leu	Leu	Phe 160
Ser	Cys	Leu	Leu	Trp 165	Leu	Thr	Phe	Met	Tyr 170	Phe	Phe	Trp	Lys	Leu 175	Gly
Asp	Pro	Phe	Pro 180	Ile	Leu	Ser	Pro	Lys 185	His	Gly	Ile	Leu	Ser 190	Ile	Glu
Gln	Leu	Ile 195	Ser	Arg	Val	Gly	Val 200	Ile	Gly	Val	Thr	Leu 205	Met	Ala	Leu
Leu	Ser 210	Gly	Phe	Gly	Ala	Val 215	Asn	Cys	Pro	Tyr	Thr 220	Tyr	Met	Ser	Tyr
Phe 225	Leu	Arg	Asn	Val	Thr 230	Asp	Thr	Asp	Ile	Leu 235	Ala	Leu	Glu	Arg	Arg 240
Leu	Leu	Gln	Thr	Met 245	Asp	Met	Ile	Ile	Ser 250	Lys	Lys	Lys	Arg	Met 255	Ala
Met	Ala	Arg	Arg 260	Thr	Met	Phe	Gln	Lys 265	Gly	Glu	Val	His	Asn 270	Lys	Pro
Ser	Gly	Phe 275	Trp	Gly	Met	Ile	Lys 280	Ser	Val	Thr	Thr	Ser 285	Ala	Ser	Gly
Ser	Glu 290	Asn	Leu	Thr	Leu	Ile 295	Gln	Gln	Glu	Val	Asp 300	Ala	Leu	Glu	Glu
Leu 305	Ser	Arg	Gln	Leu	Phe 310	Leu	Glu	Thr	Ala	Asp 315	Leu	Tyr	Ala	Thr	Lys 320
Glu	Arg	Ile	Glu	Tyr 325	Ser	Lys	Thr	Phe	Lys 330	Gly	Lys	Tyr	Phe	Asn 335	Phe
Leu	Gly	Tyr	Phe 340	Phe	Ser	Ile	Tyr	Cys 345	Val	Trp	Lys	Ile	Phe 350	Met	Ala
Thr	Ile	Asn 355	Ile	Val	Phe	Asp	Arg 360	Val	Gly	Lys	Thr	Asp 365	Pro	Val	Thr
Arg	Gly 370	Ile	Glu	Ile	Thr	Val 375	Asn	Tyr	Leu	Gly	Ile 380	Gln	Phe	Asp	Val
Lys 385	Phe	Trp	Ser	Gln	His 390	Ile	Ser	Phe	Ile	Leu 395	Val	Gly	Ile	Ile	Ile 400
Val	Thr	Ser	Ile	Arg 405	Gly	Leu	Leu	Ile	Thr 410	Leu	Xaa	Xaa	Val	Ile 415	Leu

```
<210> 1396
```

<211> 71

<212> PRT

<213> Homo sapiens

<400> 1396

Ile Ile Tyr Val His Ile Val Gln Gln Lys Tyr Asn Val Asn His Asn 1 5 10 15

Ile Ile Phe Asn Phe Leu Val Ala Ile Leu Lys Lys Lys Gln Ala Lys 20 25 30

Leu Ile Leu Ile Thr Val Tyr Val Thr Gln Tyr Ile Lys Asn Ile Ile 35 40 45

Ser Thr Cys Asn Gln Tyr Lys Arg Leu Leu Met Lys His Leu Ile Phe 50 55 60

Phe Phe Phe His Thr Lys Ser 65 70

<210> -1397

<211> 204

<212> PRT

<213> Homo sapiens

<400> 1397

Ala Pro Arg Leu Val Val Thr Cys Arg His Val Ser Pro Arg Glu Ala 1 5 10 15

Ala Arg Val Leu Val Arg Ser Thr Thr Pro Lys Ser Val Ala Ile Trp
20 25 30

Gly Arg Val Val Phe Ala Thr Gln Glu Thr Cys Pro Tyr Asp Ile Ala 35 40 45

Val Val Ser Leu Glu Glu Asp Leu Asp Asp Val Pro Ile Pro Val Pro 50 55 60

Ala Glu His Phe His Glu Gly Glu Ala Val Ser Val Val Gly Phe Gly 65 70 75 80

Val Phe Gly Gln Ser Cys Gly Pro Ser Val Thr Ser Gly Ile Leu Ser

90 95

Ala Val Val Gln Val Asn Gly Thr Pro Val Met Leu Gln Thr Thr Cys 100 105 110

Ala Val His Ser Gly Ser Ser Gly Gly Pro Leu Phe Ser Asn His Ser 115 120 125

Gly Asn Leu Leu Gly Ile Ile Thr Ser Asn Thr Arg Asp Asn Asn Thr 130 135 140

Gly Ala Thr Tyr Pro His Leu Asn Phe Ser Ile Pro Ile Thr Val Leu 145 150 155 160

Gln Pro Ala Leu Gln Gln Tyr Ser Gln Thr Gln Asp Leu Gly Gly Leu 165 170 175

Arg Glu Leu Asp Arg Ala Ala Glu Pro Val Arg Val Val Trp Arg Leu 180 185 190

Gln Arg Pro Leu Ala Glu Ala Pro Arg Ser Lys Leu 195 200

<210> 1398

<211> 69

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1398

Val Phe Ile Val Phe Asn Ser Val Thr Ser Arg Phe Phe Pro Lys Lys
1 5 10 15

Phe Leu Xaa Ile Lys Ser Arg Leu Phe Arg Lys Tyr Leu Pro Val Leu 20 25 30

His Phe Asn Phe Thr Asn Gln Thr Thr Ala Ile Gln Pro Ile Lys Gln 35 40 45

Gln Lys Gln Ser Lys Glu Arg Asp Leu Asp Ile Gly Ile Lys Glu Ser 50 55 60

Phe His Phe Ile Ile

```
<210> 1399
<211> 238
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids
Glu Ala Glu Ala Glu Arg Gly Pro Leu His Ala Gly Lys Gln Pro
Arg Xaa Pro Gly Gly Ala Arg Trp Pro Cys Cys Ser Ala Phe Lys
Glu Gln Gln Phe Val Ile Ala Gly Val Leu Val Glu Asp Ser Asn Asn
                            40
His His Leu Met Leu Glu Ala Ser Xaa Trp Ala Thr Ile Glu Gly Leu
Val Glu Leu Leu Gln Pro Phe Lys Gln Val Ala Glu Met Leu Ser Ala
                                         75
Ser Arg Tyr Pro Thr Ile Ser Met Val Lys Pro Leu Leu His Met Leu
                85
                                    90
Leu Asn Thr Thr Leu Asn Ile Lys Glu Thr Asp Ser Lys Glu Leu Ser
           100
                               105
Met Ala Lys Glu Val Ile Ala Lys Glu Leu Ser Lys Thr Tyr Gln Glu
                           120
Thr Pro Glu Ile Asp Met Phe Leu Asn Val Ala Thr Phe Leu Asp Pro
                       135
Arg Tyr Lys Arg Leu Pro Phe Leu Ser Ala Phe Glu Arg Gln Gln Val
145
Glu Asn Arq Val Val Glu Glu Ala Lys Gly Cys Trp Thr Arg Ser Lys
                165
                                   170
```

Thr Ala Ala Thr Gly Arg Leu Arg Thr Arg Ser Ser Arg Cys Pro Arg 180 185 190

Ser Leu Pro Ser Arg Ser Ser Cys Gly His Pro Arg Arg Pro Pro 195 200 205

Ala Ser Ser Thr Thr Cys Trp Pro Arg Ser Ser Ala Arg Gln Ala Ala 210 215 220

Trp Arg Thr Arg Lys Ser Gly Met Pro Arg Trp Trp Arg Ser 225 230 235

<210> 1400

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1400

Phe Leu Lys Leu Cys Gly Leu Lys Trp Gln Val Ala Ser Thr Asp Phe 1 5 10 15

Thr Arg Phe Lys Leu Ile Phe Lys Ser Asn His Trp Arg Asn Arg Tyr
20 25 30

Thr Phe Val Cys Arg Ile Phe Thr Ser Tyr Asn Ser Thr Arg Lys Val
35 40 45

Phe Ser Phe Pro Ala Asp Ala Gly Thr Pro Thr Gly Thr Leu Gln Lys 50 55 60

Asp Ala Ser Pro Asp Cys Thr Asp Gly Arg Trp Lys His Gly Pro Val 65 70 75 80

Cys Gly Xaa

<210> 1401

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1401

Gly Ala Leu Cys Ala Val Trp Ala Arg Ala Gly Arg Pro Gly Pro Gln
1 5 10 15

Asp Val Arg Cys Pro Leu Arg Arg Ala Gly Ala Cys Gly Glu Thr Arg 20 25 30

Ala Thr Cys Glu Arg Gly Pro Glu Thr Phe Cys Thr Arg Glu Leu Arg
35 40 45

Gly Leu Ser Asn Pro Ala Ser Val Gly Asn Val Ser Glu Thr Gln Gly
50 55 60

Glu Trp Pro Gln Pro Phe Val Thr Cys Ser Pro Ala Cys Pro Lys
65 70 75

<210> 1402

<211> 222

<212> PRT

<213> Homo sapiens

<400> 1402

Pro Ala Asn Gly Leu Leu Phe Gly Gly Leu Arg Ser Arg Glu Leu Arg

1 5 10 15

Val Phe Ala Arg Leu Ser Thr Phe Arg Lys Ile Arg Ala Gly Val Trp 20 25 30

Glu Val Pro His Ser Thr Gly Gln Arg Pro Leu Asp Ser Arg Gly Asn $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Gln Leu Trp Val Arg Gly His Leu Ala Leu Val Phe Ala Leu Tyr 50 55 60

Arg Ser Cys Gly Pro Arg Gly Ala Ser Gly Glu Asp Val Ser Gly Arg 65 70 75 80

Gly Phe Pro Ala Phe Cys Leu Gly Gln Trp Gly Cys Ser Cys Leu Ser 85 90 95

Phe Ser Pro Thr Pro Trp Thr Val Leu Gly Cys Trp Cys Thr Trp Leu 100 105 110

Ala His Gly Gly Gln Arg Ala Glu Asn Ala Thr Ala Trp Leu Leu Val 115 120 125

Pro Phe Asp Gln Glu Thr Gln Glu Glu Thr Pro Gln Ser Ala Glu Arg 130 135 140

Pro Pro Gly Ser Leu Ala His Ser Arg Ser Gly Arg Asp Gly Arg Val

145 150 155 160

Ser Ser Leu Ser Ser Gly Ile Arg Lys Gly Met Val Ser Thr Pro His 165 170 175

Cys Gly Gly Phe Arg Gln Gly Ser Tyr Cys Leu Leu Cys Leu Gly Phe 180 185 190

Pro Ile Trp Lys Met Gly Ala Gly Val Leu Thr Tyr Leu Arg Trp Asn 195 200 205

Gly Glu Gln Gly Thr Cys Arg Ser Pro Ser Glu Asn Val Met 210 215 220

<210> 1403

<211> 139

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (126)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1403

Arg Ala Thr Leu Glu His Pro Ala Leu Val Pro Leu Gln Pro Ala Glu
1 5 10 15

Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Leu Pro Phe Leu 20 25 30

Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val 35 40 45

Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Val Thr Gly 50 55 60

Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
65 70 75 80

Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu 85 90 95

Val Ala Lys Glu Ile Gln Thr Thr Gly Asn Gln Gln Val Leu Val
100 105 110

Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Xaa Ala Lys
115 120 125

Gly Phe Leu Ala Glu Glu Lys His Leu His Val 130 135

<210> 1404

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1404

Glu Glu Gln His Ser Met Leu Gly Ser Gly Phe Lys Ala Glu Arg Leu
1 5 10 15

Arg Val Asn Leu Arg Leu Val Ile Asn Arg Leu Lys Leu Leu Glu Lys
20 25 30

Lys Lys Thr Glu Leu Ala Gln Lys Ala Arg Lys Glu Ile Ala Asp Tyr 35 40 45

Leu Ala Ala Gly Lys Asp Glu Arg Ala Arg Ile Arg Val Glu His Ile
50 55 60

Ile Arg Glu Asp Tyr Leu Val Glu Ala Met Glu Ile Leu Glu Leu Tyr 65 70 75 80

Cys Asp Leu Leu Ala Arg Phe Gly Leu Ile Gln Ser Met Lys Glu 85 90 95

Leu Asp Ser Gly Leu Ala Glu Ser Val Ser Thr Leu Ile Trp Ala Ala 100 105 110

Pro Arg Leu Gln Ser Glu Val Ala Glu Leu Lys Ile Val Ala Asp Gln 115 120 125

Leu Cys Ala Lys Tyr Ser Lys Glu Tyr Gly Lys Leu Cys Arg Thr Asn 130 135 140

Gln Ile Gly Thr Val Asn Asp Arg Leu Met His Lys Leu Ser Val Glu 145 150 155 160

Ala Pro Pro Lys Ile Leu Val Glu Arg Tyr Leu Ile Glu Ile Ala Lys 165 170 175

Asn Tyr Asn Val Pro Tyr Glu Pro Asp Ser Val Val Met Ala Glu Ala 180 185 190

Pro Pro Gly Val Glu Thr Asp Leu Ile Asp Val Gly Phe Thr Asp Asp 195 200 205

Val Lys Lys Gly Gly Pro Gly Arg Gly Gly Ser Gly Gly Phe Thr Ala

210 215 220

Pro Val Gly Gly Pro Asp Gly Thr Val Pro Asp Ala His Ala His Ala 225 230 235 240

Tyr Ala Ile Cys Lys Tyr Ala Phe Leu Ile Ser Thr Ala Lys Gly Thr 245 250 255

Ile Arg Phe Gln Trp Thr Ala Asn Gly Asp Leu Ser Gly Leu Ser Gln 260 265 270

Tyr Ser Ser Thr Ser Asp Thr Ser Asn Ser Pro Ile Val 275 280 285

<210> 1405

<211> 196

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1405

Arg Val Thr Phe Asn Asn Leu Ser Ile Ser Gly Glu Leu Glu Ala Val 1 5 10 15

Gln Asn Met Val Ser Thr Val Glu Cys Ala Leu Lys His Val Ser Asp 20 25 30

Trp Leu Asp Glu Thr Asn Lys Gly Thr Lys Thr Glu Gly Glu Thr Glu
35 40 45

Val Lys Lys Asp Glu Ala Gly Glu Asn Tyr Ser Lys Asp Gln Gly Gly 50 55 60

Arg Thr Leu Cys Gly Val Met Arg Ile Gly Leu Val Ala Lys Gly Leu 65 70 75 80

Leu Ile Lys Asp Asp Met Asp Leu Glu Leu Val Leu Met Cys Lys Asp 85 90 95

Lys Pro Thr Glu Thr Leu Leu Asn Thr Val Lys Asp Asn Leu Pro Ile 100 105 110

Xaa Ile Gln Lys Leu Thr Glu Glu Lys Tyr Gln Val Glu Gln Cys Val 115 120 125

Asn Glu Ala Ser Ile Ile Ile Arg Asn Thr Lys Glu Pro Thr Leu Thr Leu Lys Val Ile Leu Thr Ser Pro Leu Ile Arg Asp Glu Leu Glu Lys 155 150 Lys Asp Gly Glu Asn Val Ser Met Lys Asp Pro Pro Asp Leu Leu Asp 170 Arg Gln Lys Cys Leu Asn Ala Leu Ala Ser Leu Arg His Ala Lys Trp 185 Phe Gln Ala Arg 195 <210> 1406 <211> 329 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (312) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1406 Pro Pro Arg Pro Leu Ser Ala Arg Lys Leu Trp Pro Pro Leu Pro Pro 10 Pro Pro Thr Arg Thr Pro Ala Glu Pro Pro Arg Pro Arg Gly Arg Asn 20 30 25 Pro Ala Ser Asn Asn Ser Asn Ser Leu Asn Val Asn Asn Gly Val Pro 40 Gly Gly Ala Ala Ala Ala Ser Ser Ala Thr Val Ala Ala Ala Ser Ala Thr Thr Ala Ala Ser Ser Leu Ala Thr Pro Glu Leu Gly Ser Ser 65 70 75 Leu Lys Lys Lys Arg Leu Ser Gln Ser Asp Glu Asp Val Ile Arg 85 90 Leu Ile Gly Gln His Leu Asn Gly Leu Gly Leu Asn Gln Thr Val Asp 105

Leu Leu Met Gln Glu Ser Gly Cys Arg Leu Glu His Pro Ser Ala Thr 120

125

Lys Phe Arg Asn His Val Met Glu Gly Asp Trp Asp Lys Ala Glu Asn Asp Leu Asn Glu Leu Lys Pro Leu Val His Ser Pro His Ala Ile Val 145 155 Val Arg Gly Ala Leu Glu Ile Ser Gln Thr Leu Leu Gly Ile Ile Val 165 170 Arg Met Lys Phe Leu Leu Gln Gln Lys Tyr Leu Glu Tyr Leu Glu Asp Gly Lys Val Leu Glu Ala Leu Gln Val Leu Arg Cys Glu Leu Thr 195 200 Pro Leu Lys Tyr Asn Thr Glu Arg Ile His Val Leu Ser Gly Tyr Leu 215 Met Cys Ser His Ala Glu Asp Leu Arg Ala Lys Ala Glu Trp Glu Gly 230 235 Lys Gly Thr Ala Ser Arg Ser Lys Leu Leu Asp Lys Leu Gln Thr Tyr 245 250 Leu Pro Pro Ser Val Met Leu Pro Pro Arg Arg Leu Gln Thr Leu Leu 265 Arg Gln Ala Val Glu Leu Gln Arg Asp Arg Cys Leu Tyr His Asn Thr 280 Lys Leu Asp Asn Asn Leu Asp Ser Val Ser Leu Leu Ile Asp His Val 290 295 Cys Ser Lys Arg Gln Phe Pro Xaa Leu Tyr Ala Ala Asp Thr Tyr Gly 305 310 315 Ser Ile Val Met Asn Phe Gly Ser Cys 325

<210> 1407

<211> 713

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (280)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (282)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (322)
<223> Xaa equals any of the naturally occurring L-amino acids
Ser Pro Gly Pro Gln Pro His Ser Xaa Xaa Arg Ser Pro Pro Pro Pro
                  5
Pro Leu Arg Pro Pro Pro Met Lys Arg Leu Pro Leu Leu Val Val Phe
                                 25
Ser Thr Leu Leu Asn Cys Ser Tyr Thr Gln Asn Cys Thr Lys Thr Pro
                             40
Cys Leu Pro Asn Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys
     50
                         55
Tyr Cys Asn Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp
Asp Asn Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn
                 85
                                     90
Cys Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe
            100
                                105
Arg Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr Val
        115
                            120
```

WO 00/55174 1221 PCT/US00/05988

Cys	Ile 130	Glu	Asn	Val	Xaa	Ala 135		Cys	His	Leu	Asp 140	Asn	Val	Cys	Ile
Ala 145	Ala	Asn	Ile	Asn	Lys 150	Thr	Leu	Thr	Lys	Ile 155	Arg	Ser	Ile	Lys	Glu 160
Pro	Val	Ala	Leu	Leu 165	Gln	Glu	Val	Tyr	Arg 170		Ser	Val	Thr	Asp 175	Leu
Ser	Pro	Thr	Asp 180	Ile	Ile	Thr	Tyr	Ile 185	Glu	Ile	Leu	Ala	Glu 190	Ser	Ser
Ser	Leu	Leu 195	Gly	Tyr	Lys	Asn	Asn 200	Thr	Ile	Ser	Ala	Lys 205	Asp	Thr	Leu
Ser	Asn 210	Ser	Thr	Leu	Thr	Glu 215	Phe	Val	Lys	Thr	Val 220	Asn	Asn	Phe	Val
Gln 225	Arg	Asp	Thr	Phe	Val 230	Val	Trp	Asp	Lys	Leu 235	Ser	Val	Asn	His	Arg 240
Arg	Thr	His	Leu	Thr 245	Lys	Leu	Met	His	Thr 250	Val	Glu	Gln	Ala	Thr 255	Leu
Arg	Ile	Ser	Gln 260	Ser	Phe	Gln	Lys	Thr 265	Thr	Glu	Phe	Asp	Thr 270	Asn	Ser
Thr	Asp	Ile 275	Ala	Leu	Lys	Val	Xaa 280	Phe	Xaa	Asp	Ser	Tyr 285	Asn	Met	Lys
His	Ile 290	His	Pro	His	Met	Asn 295	Met	Asp	Gly	Asp	Tyr 300	Ile	Asn	Ile	Phe
Pro 305	Lys	Arg	Lys	Ala	Ala 310	Tyr	Asp	Ser	Asn	Gly 315	Asn	Val	Ala	Val	Ala 320
Phe	Xaa	Tyr	Tyr	Lys 325	Ser	Ile	Gly	Pro	Leu 330	Leu	Ser	Ser	Ser	Asp 335	Asn
Phe	Leu	Leu	Lys 340	Pro	Gln	Asn	Tyr	Asp 345	Asn	Ser	Glu	Glu	Glu 350	Glu	Arg
Val	Ile	Ser 355	Ser	Val	Ile	Ser	Val 360	Ser	Met	Ser	Ser	Asn 365	Pro	Pro	Thr
Leu	Tyr 370	Glu	Leu	Glu	Lys	Ile 375	Thr	Phe	Thr	Leu	Ser 380	His	Arg	Lys	Val
Thr 385	Asp	Arg	Tyr	Arg	Ser 390	Leu	Cys	Ala	Phe	Trp 395	Asn	Tyr	Ser	Pro	Asp 400

WO 00/55174 1222 PCT/US00/05988

Thr	Met	Asn	Gly	Ser 405	Trp	Ser	Ser	Glu	Gly 410	Cys	Glu	Leu	Thr	Tyr 415	Ser
Asn	Glu	Thr	His 420	Thr	Ser	Cys	Arg	Cys 425	Asn	His	Leu	Thr	His 430	Phe	Ala
Ile	Leu	Met 435	Ser	Ser	Gly	Pro	Ser 440	Ile	Gly	Ile	Lys	Asp 445	Tyr	Asn	Ile
Leu	Thr 450	Arg	Ile	Thr	Gln	Leu 455	Gly	Ile	Ile	Ile	Ser 460	Leu	Ile	Cys	Leu
Ala 465	Ile	Cys	Ile	Phe	Thr 470	Phe	Trp	Phe	Phe	Ser 475	Glu	Ile	Gln	Ser	Thr 480
Arg	Thr	Thr	Ile	His 485	Lys	Asn	Leu	Cys	Cys 490	Ser	Leu	Phe	Leu	Ala 495	Glu
Leu	Val	Phe	Leu 500	Val	Gly	Ile	Asn	Thr 505	Asn	Thr	Asn	Lys	Leu 510	Phe	Cys
Ser	Ile	Ile 515	Ala	Gly	Leu	Leu	His 520	Tyr	Phe	Phe	Leu	Ala 525	Ala	Phe	Ala
Trp	Met 530	Cys	Ile	Glu	Gly	Ile 535	His	Leu	Tyr	Leu	Ile 540	Val	Val	Gly	Val
Ile 545	Tyr	Așn	Lys	Gly	Phe 550	Leu	His	Lys	Asn	Phe 555	Tyr	Ile	Phe	Gly	Туг 560
Leu	Ser	Pro	Ala	Val 565	Val	Val	Gly	Phe	Ser 570	Ala	Ala	Leu	Gly	туг 575	Arg
Tyr	Tyr	Gly	Thr 580	Thr	Lys	Val	Cys	Trp 585	Leu	Ser	Thr	Glu	Asn 590	Asn	Phe
Ile	Trp	Ser 595	Phe	Ile	Gly	Pro	Ala 600	Cys	Leu	Ile	Ile	Leu 605	Val	Asn	Leu
Leu	Ala 610	Phe	Gly	Val	Ile	Ile 615	Tyr	Lys	Val	Phe	Arg 620	His	Thr	Ala	Gly
Leu 625	Lys	Pro	Glu	Val	Ser 630	Cys	Phe	Glu	Asn	Ile 635	Arg	Ser	Cys	Ala	Arg 640
Gly	Ala	Leu	Ala	Leu 645	Leu	Phe	Leu	Leu	Gly 650	Thr	Thr	Trp	Ile	Phe 655	Gly
Val	Leu	His	Val 660	Val	His	Ala	Ser	Val 665	Val	Thr	Ala	Tyr	Leu 670	Phe	Thr

Val Ser Asn Ala Phe Gln Gly Met Phe Ile Phe Leu Phe Leu Cys Val 675 680 685

Leu Ser Arg Lys Ile Gln Glu Glu Tyr Tyr Arg Leu Phe Lys Asn Val 690 695 700

Pro Cys Cys Phe Gly Cys Leu Ser Cys 705 710

<210> 1408

<211> 336

<212> PRT

<213> Homo sapiens

<400> 1408

Gln Arg Gly His Gln Gly Cys Arg Arg Ala Arg Asn Cys Arg Val Gln
1 5 10 15

His Pro Val Cys Ser Arg Gly Arg Asp Ser Gly Leu Tyr His Leu Pro 20 25 30

His Pro Gln Pro Val Pro Glu Asn Thr Trp Leu Tyr Gln Ala Leu Arg
35 40 45

Glu Gly Thr Arg Val Gln Ser Val Glu Gln Ile Arg Glu Val Ala Ser 50 55 60

Gly Ala Ala Arg Ile Arg Gly Glu Thr Leu Gly Leu Ile Gly Phe Gly 65 70 75 80

Arg Thr Gly Gln Ala Val Ala Val Arg Ala Lys Ala Phe Gly Phe Ser $85 \hspace{1cm} 90 \hspace{1cm} 95$

Val Ile Phe Tyr Asp Pro Tyr Leu Gln Asp Gly Ile Glu Arg Ser Leu 100 105 110

Gly Val Gln Arg Val Tyr Thr Leu Gln Asp Leu Leu Tyr Gln Ser Asp 115 120 125

Cys Val Ser Leu His Cys Asn Leu Asn Glu His Asn His His Leu Ile 130 135 140

Asn Asp Phe Thr Ile Lys Gln Met Arg Gln Gly Ala Phe Leu Val Asn 145 150 155 160

Ala Ala Arg Gly Gly Leu Val Asp Glu Lys Ala Leu Ala Gln Ala Leu 165 170 175

Lys Glu Gly Arg Ile Arg Gly Ala Ala Leu Asp Val His Glu Ser Glu

180 185 190

Pro Phe Ser Phe Ala Gln Gly Pro Leu Lys Asp Ala Pro Asn Leu Ile 195 200 205

Cys Thr Pro His Thr Ala Trp Tyr Ser Glu Gln Ala Ser Leu Glu Met 210 215 220

Arg Glu Ala Ala Ala Thr Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile 225 230 235 240

Pro Glu Ser Leu Arg Asn Cys Val Asn Lys Glu Phe Phe Val Thr Ser 245 250 255

Ala Pro Trp Ser Val Ile Asp Gln Gln Ala Ile His Pro Glu Leu Asn 260 265 270

Gly Ala Thr Tyr Arg Tyr Pro Pro Gly Ile Val Gly Val Ala Pro Gly 275 280 285

Gly Leu Pro Ala Ala Met Glu Gly Ile Ile Pro Gly Gly Ile Pro Val 290 295 300

Thr His Asn Leu Pro Thr Val Ala His Pro Ser Gln Ala Pro Ser Pro 305 310 315 320

Asn Gln Pro Thr Lys His Gly Asp Asn Arg Glu His Pro Asn Glu Gln 325 330 335

<210> 1409

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1409

Glu Ala Glu Glu Asp Thr Ser Glu Arg Ser Glu Glu Lys Arg Ser Val

1 10 15 Asn Cys Trp Asp Leu Gly Asp Gln Val Gln Gly Gly Glu Tyr Lys Leu 20 25 30 Ser Leu Phe Gly Phe Ala Ile Leu Gly Leu Thr Lys Pro Cys Ser Ile 40 Ser Ser Ile Leu Gly Asn Asn Leu Leu Arg Trp Ala Phe Ile Phe Cys 55 Phe Pro Glu Leu Glu Ile Ser Ile Xaa Xaa Lys Leu 65 70 75 <210> 1410 <211> 236 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (157) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (167) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (181) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (183) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1410 His Ala Ala Ser Thr Thr Cys Pro Glu Gln Met Asp Cys Ser Pro Thr 5 10 Asp Ser Ser Ser Ala Ser Pro Gly Ala Ser Thr Thr Ser Thr Pro Gly 20 Ala Ser Pro Ala Pro Arg Ser Arg Lys Pro Gly Ala Val Ile Glu Ser

Phe Val Asn His Ala Pro Gly Val Phe Ser Gly Thr Phe Ser Gly Thr 50 55 60

Leu His Pro Asn Cys Gln Asp Ser Ser Gly Arg Pro Arg Arg Asp Ile
65 70 75 80

Gly Thr Ile Leu Gln Ile Leu Asn Asp Leu Leu Ser Ala Thr Arg His $85 \hspace{1cm} 90 \hspace{1cm} 95$

Tyr Gln Gly Met Pro Pro Ser Leu Ala Gln Leu Arg Cys His Ala Gln 100 105 110

Cys Ser Pro Ala Ser Pro Ala Pro Asp Leu Ala Pro Arg Thr Thr Ser 115 120 125

Cys Glu Lys Leu Thr Ala Ala Pro Ser Ala Ser Leu Leu Gln Gly Gln 130 135 140

Ser Gln Ile Arg Met Cys Lys Pro Pro Gly Asp Arg Xaa Ser Ala Asp 145 150 155 160

Arg Lys Pro Arg His Ala Xaa Lys Val Glu Arg Leu Gln Leu Leu 165 170 175

His Glu Lys Arg Xaa Ser Xaa Lys Gly Pro Ala Gly Pro Arg Val Ser 180 185 190

Val Pro Leu Val Thr Gln Pro Gln Gly Gly Arg Ser Asp Ser Ser Ser 195 200 205

Ser Gly Gly Gly Thr Gln Ala Gln Ala Ser Gly Leu Gly Leu Asp 210 215 220

Phe Glu Glu Leu Arg Met Glu Ala Arg Ser Gln Pro 225 230 235

<210> 1411

<211> 280

<212> PRT

<213> Homo sapiens

<400> 1411

Asn Trp Gln Cys Cys Val Lys Thr Met Val Tyr His His Met Thr Glu
1 5 10 15

Glu Glu Arg Phe Glu Val Asp Gln Leu Gln Gly Leu Arg Asn Ser Val 20 25 30

Arg Met Glu Leu Gln Asp Leu Glu Leu Glu Glu Glu Arg Leu Leu

35 40 45

Gly Leu Glu Glu Gln Leu Arg Ala Val Arg Met Pro Ser Pro Phe Arg 50 55 60

Ser Ser Ala Leu Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu 65 70 75 80

Ser Cys Pro Ser Pro Leu Asn Val Met Glu Pro Val Thr Glu Leu Met 85 90 95

Gln Glu Gln Ser Tyr Leu Lys Ser Glu Leu Gly Leu Gly Leu Gly Glu 100 105 110

Met Gly Phe Glu Ile Pro Pro Gly Glu Ser Ser Glu Ser Val Phe Ser 115 120 125

Gln Ala Thr Ser Glu Ser Ser Ser Val Cys Ser Gly Pro Ser His Ala 130 135 140

Asn Arg Arg Thr Gly Val Pro Ser Thr Ala Ser Val Gly Lys Ser Lys 145 150 155 160

Thr Pro Leu Val Ala Arg Lys Lys Val Phe Arg Ala Ser Val Ala Leu 165 170 175

Thr Pro Thr Ala Pro Ser Arg Thr Gly Ser Val Gln Thr Pro Pro Asp 180 185 190

Leu Glu Ser Ser Glu Glu Val Asp Ala Ala Glu Gly Ala Pro Glu Val 195 200 205

Val Gly Pro Lys Ser Glu Val Glu Glu Gly His Gly Lys Leu Pro Ser 210 215 220

Met Pro Ala Ala Glu Glu Met His Lys Asn Val Glu Gln Asp Glu Leu 225 230 235 240

Gln Gln Val Ile Arg Glu Ile Lys Glu Ser Ile Val Gly Glu Ile Arg 245 250 255

Arg Glu Ile Val Ser Gly Leu Leu Ala Ala Val Ser Ser Lys Ala 260 265 270

Ser Asn Ser Lys Gln Asp Tyr His 275 280

<210> 1412 <211> 96

```
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1412
Pro Gln His Thr Thr Pro Pro Pro Thr Glu Thr Gly Thr Ser Gly Leu
                                     10
Ser Ser Gly Val Ser Gly Ser Thr Thr Ala Ala Ser Ser Pro Xaa Gly
            20
Leu Val Glu Arg Glu Gly Val Val Leu Val Phe Gly Pro Leu Thr Ala
Asp Ser Gln Glu Val Leu Arg Arg Ala Trp His Trp Ala Gln Arg Leu
Gln Asp Tyr Cys Ala Thr Gln Pro Ala Leu Phe His Val Gly Phe Pro
65
                     70
                                         75
Val Ser Leu Ile Asp His Glu Gly Phe Gln Val Cys Xaa Asp Ser Xaa
                 85
                                     90
```

Ala Ala Asp Ile Ala Gln Thr Gln Gly Phe Gln Glu Cys Ala Gln Phe
20 25 30

Leu Leu Asn Leu Gln Asn Cys His Leu Asn His Phe Tyr Asn Asn Gly
35 40 45

Ile Leu Asn Gly Gly His Gln Asn Val Phe Pro Asn His Ile Ser Val 50 55 60

Gly Thr Asn Arg Lys Arg Cys Leu Glu Asp Ser Glu Asp Phe Gly Val 65 70 75 80

Lys Lys Ala Arg Thr Glu Ala Gln Ser Leu Asp Ser Ala Val Pro Leu 85 90 95

Thr Asn Gly Asp Thr Glu Asp Asp Ala Asp Lys Met His Val Asp Arg 100 105 110

Glu Phe Ala Val Val Thr Gly Gly Ser Gly Gln Phe Pro Val Ser Cys 115 120 125

Asn Asn Asn Pro Met Val Glu Asp Thr Lys Gln Gln Glu Ser Gly Ser 130 135 140

Val Gly Pro Lys Glu Ile Glu Ile Tyr Thr Val Ser Ala Met Gln Thr 145 150 155 160

Pro Cys Arg Cys Arg Asn Gln Tyr Ala Tyr Tyr Phe 165 170

<210> 1414

<211> 264

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (107) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1414 Leu Cys Ala Pro Arg Ser Pro Arg Pro Gly Thr Gly Asp Ala Ala Pro Pro Ser Glu Pro Xaa Ala Ser Ala Ser Gly Thr Asp Leu Leu Gly Trp 25 Leu Ile Lys Glu Glu Ala Ala Met Ser Ala Val Gly Xaa Ala Thr 35 40 Pro Tyr Leu His His Pro Gly Asp Ser His Ser Gly Arg Val Ser Phe Leu Gly Ala Gln Leu Pro Pro Glu Val Ala Ala Met Ala Arg Leu Leu 70 Gly Asp Leu Asp Xaa Ser Thr Phe Arg Lys Leu Leu Lys Phe Val Val 85 90 Ser Ser Leu Gln Gly Glu Asp Cys Arg Glu Xaa Leu Gln Arg Leu Gly 105 Val Ser Ala Asn Leu Pro Glu Glu Gln Leu Gly Ala Leu Leu Ala Gly 115 120 125 Met His Thr Leu Leu Gln Gln Ala Leu Arg Leu Pro Pro Thr Ser Leu 135 Lys Pro Asp Thr Phe Arg Asp Gln Leu Gln Glu Leu Cys Ile Pro Gln 150 155 Asp Leu Val Gly Asp Leu Ala Ser Val Val Phe Gly Xaa Pro Ala Ala 165 170 175 Leu Leu Asp Ser Val Ala Gln Gln Gln Gly Ala Trp Leu Pro His Val 180 Ala Asp Phe Arg Trp Arg Val Asp Val Ala Ile Ser Thr Ser Ala Leu

200

Ala Arg Ser Leu Gln Pro Ser Val Leu Met Gln Leu Lys Leu Ser Asp 210 Gly Ser Ala Tyr Arg Phe Glu Val Pro Thr Ala Lys Phe Gln Glu Leu 230 235 Arg Tyr Ser Val Ala Leu Val Leu Lys Glu Met Ala Asp Leu Glu Lys 250 Arg Cys Glu Arg Arg Leu Gln Asp 260 <210> 1415 <211> 579 <212> PRT <213> Homo sapiens <400> 1415 Ala Ala Asp Arg Gly Arg Gly Pro Gly Ala His Arg Pro Ile Ser Gly Asn Met Ala Thr Glu His Val Asn Gly Asn Gly Thr Glu Glu Pro Met Asp Thr Thr Ser Ala Val Ile His Ser Glu Asn Phe Gln Thr Leu Leu 40 Asp Ala Gly Leu Pro Gln Lys Val Ala Glu Lys Leu Asp Glu Ile Tyr 50 55 Val Ala Gly Leu Val Ala His Ser Asp Leu Asp Glu Arg Ala Ile Glu Ala Leu Lys Glu Phe Asn Glu Asp Gly Ala Leu Ala Val Leu Gln Gln Phe Lys Asp Ser Asp Leu Ser His Val Gln Asn Lys Ser Ala Phe Leu 100 105 Cys Gly Val Met Lys Thr Tyr Arg Gln Arg Glu Lys Gln Gly Thr Lys 120 Val Ala Asp Ser Ser Lys Gly Pro Asp Glu Ala Lys Ile Lys Ala Leu 135

Leu Glu Arg Thr Gly Tyr Thr Leu Asp Val Thr Thr Gly Gln Arg Lys

Tyr Gly Gly Pro Pro Pro Asp Ser Val Tyr Ser Gly Gln Gln Pro Ser

160

150

	165	170	175
Val Gly Thr Glu		Gly Lys Ile Pro	Arg Asp Leu Phe Glu
180		185	190
Asp Glu Leu Val	Pro Leu Phe	Glu Lys Ala Gly	Pro Ile Trp Asp Leu
195		200	205
Arg Leu Met Met	Asp Pro Leu	Thr Gly Leu Asn	Arg Gly Tyr Ala Phe
210	215		220
Val Thr Phe Cys	Thr Lys Glu	Ala Ala Gln Glu	Ala Val Lys Leu Tyr
225	230	235	240
Asn Asn His Glu	Ile Arg Ser	Gly Lys His Ile	Gly Val Cys Ile Ser
	245	250	255
Val Ala Asn Asn	Arg Leu Phe	Val Gly Ser Ile	Pro Lys Ser Lys Thr
260		265	270
Lys Glu Gln Ile	Leu Glu Glu	Phe Ser Lys Val	Thr Glu Gly Leu Thr
275		280	285
Asp Val Ile Leu	Tyr His Gln	Pro Asp Asp Lys	Lys Lys Asn Arg Gly
290	295		300
Phe Cys Phe Leu	Glu Tyr Glu	Asp His Lys Thr 315	Ala Ala Gln Ala Arg
305	310		320
Arg Arg Leu Met	Ser Gly Lys	Val Lys Val Trp	Gly Asn Val Gly Thr
	325	330	335
Val Glu Trp Ala	Asp Pro Ile	Glu Asp Pro Asp	Pro Glu Val Met Ala
340		345	350
Lys Val Lys Val	Leu Phe Val	Arg Asn Leu Ala	Asn Thr Val Thr Glu
355		360	365
Glu Ile Leu Glu	Lys Ala Phe	Ser Gln Phe Gly	Lys Leu Glu Arg Val
370	375		380
Lys Lys Leu Lys	Asp Tyr Ala	Phe Ile His Phe	Asp Glu Arg Asp Gly
385	390	395	400
Ala Val Lys Ala	Met Glu Glu	Met Asn Gly Lys	Asp Leu Glu Gly Glu
	405	410	415
Asn Ile Glu Ile	Val Phe Ala	Lys Pro Pro Asp	Gln Lys Arg Lys Glu
420		425	430
Arg Lys Ala Gln	Arg Gln Ala	Ala Lys Asn Gln	Met Tyr Asp Asp Tyr

435 440 445

Tyr Tyr Tyr Gly Pro Pro His Met Pro Pro Pro Thr Arg Gly Arg Gly 450 455 460

Arg Gly Gly Arg Gly Gly Tyr Gly Tyr Pro Pro Asp Tyr Tyr Gly Tyr 465 470 475 480

Glu Asp Tyr Tyr Asp Tyr Tyr Gly Tyr Asp Tyr His Asn Tyr Arg Gly
485 490 495

Gly Tyr Glu Asp Pro Tyr Tyr Gly Tyr Glu Asp Phe Gln Val Gly Ala 500 505 510

Arg Gly Arg Gly Arg Gly Ala Arg Gly Ala Ala Pro Ser Arg Gly 515 520 525

Arg Gly Ala Ala Pro Pro Arg Gly Arg Ala Gly Tyr Ser Gln Arg Gly 530 535 540

Gly Pro Gly Ser Ala Arg Gly Val Arg Gly Ala Arg Gly Gly Ala Gln 545 550 555 560

Gln Gln Arg Gly Arg Gly Gln Gly Lys Gly Val Glu Ala Gly Pro Asp 565 570 575

Leu Leu Gln

<210> 1416

<211> 230

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (196)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (204)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (230)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1416
Ser Thr His Ala Ser Ala His Ala Ser Glu Pro Gly Gln Gly Trp
1 5 10 15

Pro Glu Val Pro Ala Glu Gly Ala Ser Arg Pro Cys Ala Ala Val Pro 20 25 30

Gly Gly Gln Arg Gly Cys Pro Ala Cys Pro Leu Ala Gly Glu Arg Glu 35 40 45

Leu Thr His Leu Leu Pro Ala Ser Glu Gly Asp Thr Glu Pro Gln 50 55 60

Val Thr Pro His His Gln Arg Arg Cys Leu Cys Leu Ser Asp Lys Tyr 65 70 75 80

Ser Gln Ala Cys His Pro Leu Gly Ser Lys Val Arg Arg Cys Arg Lys 85 90 95

Pro Gly Pro Arg Asp Arg Gln Leu Thr Arg Val Asp Lys Ser Pro Glu 100 105 110

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu 115 120 125

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr 130 135 140

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr 145 150 155 160

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn 165 170 175

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly 180 185 190

Arg Leu Cys Xaa Gln Arg Ser Ser Asn Asn Pro Xaa Leu Gln Leu Trp 195 200 205

Lys Ser Ser Lys Ser His Thr Thr Asn Ser Lys Gly Gly Asn Pro Leu 210 215 220

Phe Phe Leu Lys Lys Xaa 225 230

<210> 1417

<211> 106

<212> PRT

```
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1417
Ala Leu Pro Val Met Thr Ala Ala Gly Thr Gly Trp Pro Glu Ala Gly
                                     10
Xaa Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile Asn Asn
Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile Arg Gln
Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser Leu Thr
     50
                         55
Thr Ala Thr Thr Trp Thr Ser Arg Thr Pro Xaa Thr Thr Ala Ala Ala
                     70
                                         75 ·
Arg Ala Ala Val Met Ala Val Trp Met Thr Ser Ala Ala Gly Arg Ser
Ala Gly Arg Ala Pro Ala Pro Gly Arg Pro
            100
<210> 1418
<211> 258
<212> PRT
<213> Homo sapiens
<400> 1418
Gly His Leu Leu Cys Ala Trp Gly Pro Gly Pro Gly Pro Leu
                 5
Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met
```

Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly

Asp	Met 50	Met	Gln	Lys	Leu	Ser 55	Gly	Gln	Leu	Ser	Asp 60	Ala	Arg	Asn	Lys
Glu 65	Asn	Leu	Gln	Pro	Gln 70	Ser	Ser	Gly	Val	Gln 75	Gly	Gln	Val	Pro	Ile 80
Ser	Pro	Glu	Pro	Leu 85	Gln	Arg	Pro	Glu	Met 90	Leu	Lys	Glu	Glu	Thr 95	Arg
Ser	Ser	Ala	Ala 100	Ala	Ala	Ala	Asp	Thr 105	Gln	Asp	Glu	Ala	Thr 110	Gly	Ala
Glu	Glu	Glu 115	Leu	Leu	Pro	Gly	Val 120	Asp	Val	Leu	Leu	Glu 125	Val	Phe	Pro
Thr	Cys 130	Ser	Val	Glu	Gln	Ala 135	Gln	Trp	Val	Leu	Ala 140	Lys	Ala	Arg	Gly
Asp 145	Leu	Glu	Glu	Ala	Val 150	Gln	Met	Leu	Val	Glu 155	Gly	Lys	Glu	Glu	Gly 160
Pro	Ala	Ala	Trp	Glu 165	Gly	Pro	Asn	Gln	Asp 170	Leu	Pro	Arg	Arg	Leu 175	Arg
Gly	Pro	Gln	Lys 180	Asp	Glu	Leu	Lys	Ser 185	Phe	Ile	Leu	Gln	Lys 190	Tyr	Met
Met	Val	Asp 195	Ser	Ala	Glu	Asp	Gln 200	Lys	Ile	His	Arg	Pro 205	Met	Ala	Pro
Lys	Glu 210	Ala	Pro	Lys	Lys	Leu 215	Ile	Arg	Tyr	Ile	Asp 220	Asn	Gln	Val	Val
Ser	Thr	Lys	Gly		Arg	Phe	Lys	Asp		Arg		Pro	Glu	Ala	Glu

Phe His

<210> 1419

<211> 280

<212> PRT

<213> Homo sapiens

245

<400> 1419

Leu Val Glu Pro Ala Met Ala Glu Pro Ala Ser Val Ala Ala Glu Ser

225 230 235 240

Glu Met Lys Ala Thr Tyr Ile Asn Leu Lys Pro Ala Arg Lys Tyr Arg

250

255

1 10 15 Leu Ala Gly Ser Arg Ala Arg Ala Arg Thr Val Leu Gly Gln Val 20 25 Val Leu Pro Gly Glu Glu Leu Leu Pro Glu Gln Glu Asp Ala Glu Gly Pro Gly Gly Ala Val Glu Arg Pro Leu Ser Leu Asn Ala Arg Ala 55 Cys Ser Arg Val Arg Val Val Cys Gly Pro Gly Leu Arg Arg Cys Gly 75 Asp Arg Leu Leu Val Thr Lys Cys Gly Arg Leu Arg His Lys Glu Pro Gly Ser Gly Ser Gly Gly Val Tyr Trp Val Asp Ser Gln Gln Lys 105 Arg Tyr Val Pro Val Lys Gly Asp His Val Ile Gly Ile Val Thr Ala 115 120 Lys Ser Gly Asp Ile Phe Lys Val Asp Val Gly Gly Ser Glu Pro Ala 135 Ser Leu Ser Tyr Leu Ser Phe Glu Gly Ala Thr Lys Arg Asn Arg Pro Asn Val Gln Val Gly Asp Leu Ile Tyr Gly Gln Phe Val Val Ala Asn 165 170 Lys Asp Met Glu Pro Glu Met Val Cys Ile Asp Ser Cys Gly Arg Ala 185 Asn Gly Met Gly Val Ile Gly Gln Asp Gly Leu Leu Phe Lys Val Thr 200 Leu Gly Leu Ile Arg Lys Leu Leu Ala Pro Asp Cys Glu Ile Ile Gln 210 Glu Val Gly Lys Leu Tyr Pro Leu Glu Ile Val Phe Gly Met Asn Gly 225 230 235 Arg Ile Trp Val Lys Ala Lys Thr Ile Gln Gln Thr Leu Ile Leu Ala 250 245 Asn Ile Leu Glu Ala Cys Glu His Met Thr Ser Asp Gln Arg Lys Gln 265 260

Ile Phe Ser Arg Leu Ala Glu Ser

275 280

<210> 1420 <211> 147 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1420 Phe Pro Gly Thr Gly Ser Asp Gly Gly Xaa Pro Glu Thr Val Asp Ser Gly Arg Ser Glu Pro Pro Gly Ala Val Leu Pro Arg Leu Arg Glu 25 Val Gly Arg Glu Arg Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly 75 Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr 85 90 Gly Pro His Glu Ala Ser Gly Xaa Xaa Gly Trp Gly Ile Val Trp Pro 100 Trp Glu Leu Arg Gly Ser Arg Ala Glu Arg Trp Leu Gly Asp Leu Arg 120 Gly Lys Ala Ala Arg Leu Ile Tyr Thr Ala Met Leu Ser Thr Ala Ser

135

140

130

His Ser Glu 145

<210> 1421

<211> 300

<212> PRT

<213> Homo sapiens

<400> 1421

Gly Leu Pro Ile Asn Cys Ile Cys Glu Arg Leu Asn Ile Ile Gly Glu
1 5 10 15

Ile Asn Thr Asp Thr Val Tyr Arg Gln Ala Ile Asn Ser Lys Met Phe
20 25 30

Glu Val Asp Met Lys Ile Ala Ala Met His Val Lys Arg Lys Gln Leu 35 40 45

His Gln Leu Leu Pro Asn His Val Leu Gln Lys Lys Lys His Ser 50 55 60

Thr Glu Gly Val Lys Leu Thr Ala Leu Asn Asp Ser Ser Leu Asp Leu 65 70 75 80

Ser Met Asp Ser Asp Asn Ser Met Ser Val Pro Ser Pro Thr Ser Ala

Thr Lys Thr Ser Pro Leu Asn Ser Ser Gly Ser Ser Gln Gly Arg Asn 100 105 110

Ser Pro Ala Pro Ala Val Thr Ala Ala Ser Val Thr Asn Ile Gln Ala 115 120 125

Thr Glu Val Ser Val Pro Gln Val Asn Ser Ser Glu Ser Ser Gly Gly
130 135 140

Thr Ser Ser Glu Ser Ile Pro Gln Thr Ala Thr Gln Pro Ala Ile Ser 145 150 155 160

Pro Pro Pro Lys Pro Thr Val Ser Arg Val Val Ser Ser Thr Arg Leu 165 170 175

Val Asn Pro Pro Pro Arg Ser Ser Gly Asn Ala Ala Thr Ser Gly Asn 180 185 190

Ala Ala Thr Lys Ile Pro Thr Pro Ile Val Gly Val Lys Arg Thr Ser 195 200 205 Ser Pro His Lys Glu Glu Ser Pro Lys Lys Thr Lys Thr Glu Glu Asp 210 215 220

Glu Thr Ser Glu Asp Ala Asn Cys Leu Ala Leu Ser Gly His Asp Lys 235 230 240

Thr Glu Ala Lys Glu Gln Leu Asp Thr Glu Thr Ser Thr Thr Gln Ser 245 250 255

Glu Thr Ile Gln Thr Ala Ala Ser Leu Leu Ala Ser Gln Lys Thr Ser 260 265 270

Ser Thr Asp Leu Ser Asp Ile Pro Ala Leu Pro Ala Asn Pro Ile Pro
275 280 285

Val Ile Lys Asn Ser Ile Lys Leu Arg Leu Asn Arg 290 295 300

<210> 1422

<211> 315

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (177)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1422

Asp Ser Pro Leu His Leu Tyr Gln Lys Asn Ala Arg Leu Lys Asn Val 1 5 10 15

Glu Phe Leu Leu Val Asn Arg Ile His Cys Gly Thr Arg His Gln Cys
20 25 30

Leu Gly Tyr Ile Lys Arg Arg Leu Ala Met Cys Ala Arg Arg Leu Gly
35 40 45

Arg Thr Arg Glu Ala Val Lys Met Met Arg Asp Leu Met Lys Glu Phe 50 55 60

Pro Leu Leu Ser Met Phe Asn Ile His Glu Asn Leu Leu Glu Ala Leu 65 70 75 80

Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr \$85\$ 90 95

Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala 100 105 110

Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Xaa Glu Ala Ala 115 120 125

Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile 130 135 140

Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp 165 170 175

Xaa Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg 180 185 190

Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe 195 200 205

Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr 210 215 220

Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His 225 230 235 240

Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe 245 250 255

Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His 260 265 270

Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Phe Leu Ser Thr 275 280 285

Leu Phe Ala Pro Leu Asn Phe Val Met Glu Lys Val Glu Ser Ile Leu 290 295 300

Pro Ser Ser Leu Trp His Gln Leu Thr Arg Ile 305 310 315

<210> 1423

<211> 164

<212> PRT

<213> Homo sapiens

<400> 1423

Ser Phe Pro Tyr Leu Phe Leu Gln Ser Lys Asn Arg Trp Cys Phe Ala 1 5 10 15

Arg Glu Leu Val Lys Arg Tyr Gln Glu Lys Trp Asp Lys Leu Leu 20 25 30

Thr Ser Thr Glu Lys Ser His Val Asp Leu Phe Pro Lys Asp Ser Ile 35 40 45

Ile Tyr Leu Thr Ala Asp Ser Pro Asn Val Met Thr Thr Phe Arg His 50 55 60

Asp Lys Val Tyr Val Ile Gly Ser Phe Val Asp Lys Ser Met Gln Pro 65 70 75 80

Gly Thr Ser Leu Ala Lys Ala Lys Arg Leu Asn Leu Ala Thr Glu Cys 85 90 95

Leu Pro Leu Asp Lys Tyr Leu Gln Trp Glu Ile Gly Asn Lys Asn Leu 100 105 110

Thr Leu Asp Gln Met Ile Arg Ile Leu Leu Cys Leu Lys Asn Asn Gly
115 120 125

Asn Trp Gln Glu Ala Leu Gln Phe Val Pro Lys Arg Lys His Thr Gly 130 135 140

Phe Leu Glu Ile Ser Gln His Ser Gln Glu Phe Ile Asn Arg Leu Lys 145 150 155 160

Lys Ala Lys Thr

<210> 1424

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1424

Glu Val Trp Leu Phe Met His Pro Ser Ser Arg Ala Leu Lys Leu His 1 5 10 15

Gly Leu Ile Lys Val Asp Ala Lys Gln Glu Arg Asn Lys Gln Lys Lys
20 25 30

Lys Thr Ser Lys Met Phe Thr Lys Lys Leu Lys Gln Met Ser Ser Ala 35 40 45

Cys Ser Ile Ser Gln Ser Leu Leu Ser Ser Val Val Asn Met Phe Gln
50 55 60

Met Thr Phe Ser Trp Lys Lys Asn Leu Tyr Asn Ile Val Glu Cys Glu 65 70 75 80

Gly

<210> 1425

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1425

Met Gly Gly Asp Ala Gly Asp Arg Glu Pro Gly Pro Ala Ala Arg Ser
1 5 10 15

Leu Gly Glu Gly Gln Ala Gly Phe Ala Thr Ala Asp His Ser Gly Gln
20 25 30

Glu Arg Glu Thr Glu Lys Ala Met Asp Arg Leu Ala Arg Gly Thr Gln 35 40 45

Ser Ile Pro Asn Asp Ser Pro Ala Arg Gly Glu Gly Thr His Ser Glu
50 60

Glu Glu Gly Phe Ala Met Asp Glu Glu Asp Ser Asp Gly Glu Leu Asn 65 70 75 80

Thr Trp Glu Leu Ser Glu Gly Thr Asn Cys Pro Pro Lys Glu Gln Pro
85 90 95

Gly Asp Leu Phe Asn Glu Asp Trp Asp Ser Glu Leu Lys Ala Asp Gln 100 105 110

Gly Asn Pro Tyr Asp Ala Asp Asp Ile Gln Glu Ser Ile Ser Gln Glu 115 120 125

Leu Lys Pro Trp Val Cys Cys Ala Pro Gln Gly Asp Met Ile Tyr Asp 130 135 140

Pro Ser Trp His His Pro Pro Pro Leu Ile Pro Tyr Tyr Ser Lys Met 145 150 155 160

Val Phe Glu Thr Gly Gln Phe Asp Asp Ala Glu Asp 165 170

```
<210> 1426
<211> 276
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (273)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1426
Cys Lys Lys Gln Arg Leu Gln Gln Gln Gln Gln Arg Arg Trp Gln
Gln Gln Gln Arg Arg Gln Gln Gln Gln Arg Arg His Arg Trp
Gln Gln Gln His His Gln Gln Gln Gln Kaa Lys Ile Leu Ile Lys
        35
                            40
Ser Ser Pro Lys Leu Ser Val Tyr Pro Asp Pro His Leu His Ser Ser
                        55
Gln Glu Arg Glu Arg Gly Lys Gly Gly Arg Lys Lys Lys Pro Asn
65
                    70
                                        75
Asn Leu Ala Glu Thr Ser Gln Arg Met Leu Gln Asn Ser Ala Val Leu
Leu Val Leu Val Ile Ser Ala Ser Ala Thr His Glu Ala Glu Gln Asn
                               105
Asp Ser Val Ser Pro Arg Lys Ser Arg Val Ala Ala Gln Asn Ser Ala
       115
                           120
                                               125
Glu Val Val Arg Cys Leu Asn Ser Ala Leu Gln Val Gly Cys Gly Ala
   130
                     135
```

Phe Ala Cys Leu Glu Asn Ser Thr Cys Asp Thr Asp Gly Met Tyr Asp

145 150 155 160 Ile Cys Lys Ser Phe Leu Tyr Ser Ala Ala Lys Phe Asp Thr Gln Gly 165 170 Lys Ala Phe Val Lys Glu Ser Leu Lys Cys Ile Ala Asn Gly Val Thr 185 Ser Lys Val Phe Leu Ala Ile Arg Arg Cys Ser Thr Phe Gln Arg Met Ile Ala Glu Val Gln Glu Glu Cys Tyr Ser Lys Leu Asn Val Cys Ser 215 Ile Ala Lys Arg Asn Pro Glu Ala Ile Thr Glu Val Val Gln Leu Pro 230 235 Asn His Phe Ser Asn Arg Tyr Tyr Asn Arg Leu Val Arg Ser Leu Leu 245 250 Glu Cys Asp Glu Asp Thr Val Ser Thr Ile Arg Asp Ser Leu Met Glu 260 265 Xaa Ile Xaa Ala 275 <210> 1427 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1427 Cys Asn Ser Arg Ser Gln Gly Leu Ala Leu Thr Gln Val Ala Ser Arg 5 10 Ile Pro Val Gly Lys Arg Pro Ala Thr Ser Gly Leu Glu Leu Ala Cys 20

Val Pro Pro Xaa Pro Ala Pro Pro Thr Ser Arg Val Gln Cys Trp Ala

35 40 45

Arg Ala Ala Gln Glu Xaa Arg Thr Arg Arg Leu Ala Arg His Gln Thr 50 55 60

His Pro Thr Gln Arg Arg Gly Pro Gln Ala Arg Pro Val Val Pro Ser 65 70 75 80

Arg Trp His Cys Ser Ser Pro Leu Leu Gln Val Gln Arg Pro His Arg 85 90 95

Asn Thr Arg Ala Cys Ala Pro Glu Pro Ser Phe Arg Pro Phe Leu His 100 105 110

Val Pro Thr Trp Asp Ala Glu Cys Ser Gly Ala Arg Thr Pro Ser Thr 115 120 125

Ala Trp Thr Ser Ala Ala Val Lys Leu Arg Glu Ala Cys Leu Ser Gly 130 135 140

Pro Gly Ser Gly Ser His Gln Leu Leu Leu Leu Thr Pro Arg Ser Lys 145 150 155 160

Arg Arg Thr Gly Gly Gly

<210> 1428

<211> 112

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1428

Gln Arg Gly Ser Thr Ser Glu Thr Pro Arg Arg Arg Ser Ser Val Trp

1 5 10 15

Pro Ala Cys Xaa Gln Glu Gly Val Lys Ser Gly Met Tyr Val Val Ile $20 \hspace{1cm} 25 \hspace{1cm} 30$

Glu Val Lys Val Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser

35 40 45

Tyr Leu Met Thr Asn Tyr Glu Ser Kaa Pro Pro Ser Pro Gln Tyr Lys
50 55 60

Lys Ile Ile Cys Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr
65 70 75 80

Gln Glu Lys Leu Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val
85 90 95

Ser Glu Glu Ile Glu Asp Ile Ile Lys Lys Gly Glu Thr Gln Thr Leu 100 105 110

<210> 1429

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1429

Pro Gly Thr His Val Ser Xaa Pro His Phe Leu Trp Gly Cys Ala Ser 1 5 10 15

Leu Arg Val Ala Asn Arg Met Ser Ser Val Gln Trp Trp Ser Gln Asp 20 25 30

Ser Val Cys Arg Ala Asp Phe Leu Ser Leu Leu Lys Thr Leu Asn Thr 35 40 45

Ala Val Phe Ser Ser Gln Gln Arg Asn Lys Ile Ser Leu Ser Asp Asn 50 55 60

Asp Asn Asn Lys Gln Ser Ile Ala Ser Thr Ala Phe Thr Ala Tyr Xaa 65 70 75 80

Lys Thr Tyr Tyr Val Pro Gly Thr Ser Thr Asp Phe Asn Leu

85 90

<210> 1430

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1430

Leu Ser Lys Gln Arg Pro Ala Val Gly Val His His Ala Phe His Leu 1 5 10 15

Pro His Cys Phe Phe Ala Ser Leu Leu Glu Ser Pro Val Ser Pro Arg
20 25 30

Leu Ala Met Asp Pro Asn Cys Ser Cys Ala Ala Gly Val Ser Cys Thr $35 \hspace{1cm} 40 \hspace{1cm} 45$

Cys Ala Gly Ser Cys Lys Cys Lys Glu Cys Lys Cys Thr Ser Cys Lys 50 60

Lys Ser Cys Cys Ser Cys Cys Pro Val Gly Cys Ser Lys Cys Ala Gln 65 70 75 80

Gly Cys Val Cys Lys Gly Ala Ser Glu Lys Cys Ser Cys Cys Asp 85 90 95

<210> 1431

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1431

Pro Arg His Leu Ile Thr Ile Ser Tyr Val Val Ala Val Arg Asn Ala 1 5 10 15

Phe Gln Val Gly Thr Trp Asp Pro Glu Ser Thr Phe Ala Pro Cys Gly
20 25 30

Gly Arg Leu Pro Xaa Xaa Lys Met Glu Ala Gln Ser Pro Tyr Tyr Gln 35 40 45

Thr Val Val Ser Arg Gly Arg Gly Glu Met Phe Ile Gly His Ser 50 55 60

Leu Ser Trp Gly Val Ile Phe Ile Thr Ile His Val Asn Cys Thr Leu 65 70 75 80

Val

<210> 1432

<211> 201

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (193)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (201)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1432

Thr His Trp Ser Lys Asp Tyr Gln Leu Val Thr Trp Ser Arg Asp Gln
1 5 10 15

Asn Asp Ile Leu Asp Gly Val Asp Glu Phe Ile Glu Ser Ile Ser Leu 35 40

Leu Pro Glu Pro Glu Lys Thr Leu His Thr Glu Asp Thr Asp His Gln 50 55 60

His Thr Ala Ser His Gly Glu Glu Glu Ala Leu Lys Glu Asp Pro Pro 65 70 75 80

Arg Asn Leu Leu Glu Glu Arg Lys Ser Asp Gln Leu Gly Leu Pro Gln
85 90 95

Thr Leu Gln Glu Phe Ser Leu Ile Asn Val Gln Ile Arg Asn Val 100 105 110

Asn Xaa Glu Met Asp Ala Ala Asp Arg Ser Cys Thr Val Ser Val His 115 120 125

Cys Ser Asn His Arg Val Lys Met Leu Val Lys Phe Pro Ala Gln Tyr 130 135 140

Pro Asn Asn Ala Ala Pro Ser Phe Gln Phe Ile Asn Pro Thr Thr Ile 145 150 155 160

Thr Ser Thr Met Lys Ala Lys Leu Leu Lys Ile Leu Lys Asp Thr Ala 165 170 175

Leu Gln Lys Val Lys Arg Gly Gln Ser Cys Leu Glu Pro Cys Leu Arg 180 185 190

Xaa Ser Ser Pro Ala Leu Ser Pro Xaa 195 200

<210> 1433

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1433

Thr Val Val Ala Trp Glu Gly Gly Tyr His Thr Phe Ser Thr Cys Leu
1 5 10 15

Thr Val Ser Trp Leu Gln Glu Asp Gln Tyr Asp His Leu Asp Ala Ala 20 25 30

Asp Met Thr Lys Val Glu Lys Ser Thr Asn Glu Ala Met Glu Trp Met
35 40 45

Asn Asn Lys Leu Asn Leu Gln Asn Lys Gln Ser Leu Thr Met Asp Pro 50 55 60

Val Val Lys Ser Lys Glu Ile Glu Ala Lys Ile Lys Glu Leu Thr Ser 65 70 75 80

Thr Cys Ser Pro Ile Ile Ser Lys Pro Lys Pro Lys Val Glu Pro Pro 85 90 95

Lys Glu Glu Gln Lys Asn Ala Glu Gln Asn Gly Pro Val Asp Gly Gln

100 105 110

Gly Asp Asn Pro Gly Pro Gln Ala Ala Glu Gln Gly Thr Asp Thr Ala 115 120 125

Val Leu Arg Ile Gln Thr Arg Ser Phe Leu Lys Trp Thr Leu Ile Asp 130 135 140

Ser Asn Thr Cys Phe Tyr 145 150

<210> 1434

<211> 145

<212> PRT

<213> Homo sapiens

<400> 1434

His Glu Val Val Glu His Asn Pro Ile Ser Val Leu Asp Ser Pro Ser 1 5 10 15

Ser Asp Cys Phe Ala Glu Trp Pro Gly Glu Leu Gly Arg Gly Trp Met
20 25 30

Asp Arg Asn Lys His Thr Glu Ser Glu Val Gln Gly Arg Trp Ser Ser 35 40 45

Phe Ser Leu Cys Arg Val Arg Met Lys Leu Cys Ser Gly Pro Trp Lys 50 55 60

Cys Pro Trp Gln Lys Pro Asn Pro Arg Phe Gln Gly Thr Leu Pro Ser 65 70 75 80

Cys Glu Arg Glu Arg Asn Cys Gly Gln Gly Leu Gly Leu Glu Ala Gly 85 90 95

Arg Trp Asp His Ser Asp Thr Met Gln Asp Asn Arg Trp Gln Leu Gly 100 105 110

Leu Lys Ile Lys Met Asn Tyr Met Ile Phe Asp Lys Leu Phe Asn Pro 115 120 125

Trp Ser Leu His Phe Leu Tyr Lys Thr Gly Thr Ile Leu Ile Pro Thr 130 135 140

Leu

145

<210> 1435 <211> 46

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1435

Ala Gly Ala Gln Trp His Asn His Ser Ser Leu Gln Pro Trp Asn Ser 1 5 10 15

Gln Ala Gln Val Ile Leu Pro Ser Ala Pro Ala Arg Val Ala Gly Thr 20 25 30

Pro Gly Met His His Tyr Asn Gln Leu Ile Phe Phe Xaa Phe 35 40 45

<210> 1436

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1436

Asn Ser Thr Met Ala Tyr Arg Gly Gln Gly Gln Lys Val Gln Lys Val
1 5 10 15

Met Val Gln Pro Ile Asn Leu Ile Phe Arg Tyr Leu Gln Asn Arg Ser 20 25 30

Arg Ile Gln Val Trp Leu Tyr Glu Gln Val Asn Met Arg Ile Glu Gly
35 40 45

Cys Ile Ile Gly Phe Asp Glu Tyr Met Asn Leu Val Leu Asp Asp Ala 50 60

Glu Glu Ile His Ser Lys Thr Lys Ser Arg Lys Gln Leu Gly Arg Ile
65 70 75 80

Met Leu Lys Gly Asp Asn Ile Thr Leu Leu Gln Ser Val Ser Asn 85 90 95

<210> 1437

<211> 113

<212> PRT

<213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1437 Gln Gly Ala Leu Gly Ser Pro Val Pro Val Ala Val Ala Pro Leu Thr 5 10 Pro Pro Ser Xaa Cys Pro Ala Pro Pro Leu Arg Pro Pro His Thr Pro 25 Leu Ala Leu Thr Thr Cys Ile Ser Pro Ala Cys Val His Pro Pro Gly 40 Trp Leu Thr His Ser His Ser His Thr Gln Ile Ser Gly Thr Asn Gly 50 55 60 Pro Arg Val Leu Arg Thr Pro Ala Gln Gly Leu Cys Arg Ser Leu Pro 70 His Ala Phe Pro Ser Leu Thr Lys Pro Pro Ala Ala Ser Phe Lys Leu Gly Ala Pro Ala Leu Gly Leu Ser Cys Ala Leu Phe Phe Phe Phe 105 Phe <210> 1438 <211> 122 <212> PRT <213> Homo sapiens

<221> Homo sapiens

<220>
<221> SITE
<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1438

Phe Leu His Thr Phe Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Xaa

1 5 10 15

Arg Asp Val Leu Lys Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp

20 25 30

Glu Met Glu Arg Thr Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro 35 40

Thr Ala Asp Ile Val Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu 50 55 60

Ala Ser Gln Ala Ala Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro 65 70 75 80

His Leu Phe Ser Pro Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His
85 90 95

Lys Ser Gly Thr Val Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp 100 105 110

Ser Ile Phe Leu Ile Ser Asn His Val Ser 115 120

<210> 1439

<211> 323

<212> PRT

<213> Homo sapiens

<400> 1439

Phe Val Ser Pro Ala Ile Asp Ser Thr Arg Gly Asp Ser Ser Ser Leu

1 5 10 15

Val Ala Glu Leu Gln Glu Lys Leu Gln Glu Glu Lys Ala Lys Phe Leu
20 25 30

Glu Gln Leu Glu Glu Gln Glu Lys Arg Lys Asn Glu Glu Met Gln Asn 35 40 45

Val Arg Thr Ser Leu Ile Ala Glu Gln Gln Thr Asn Phe Asn Thr Val 50 55 60

Leu Thr Arg Glu Lys Met Arg Lys Glu Asn Ile Ile Asn Asp Leu Ser
65 70 75 80

Asp Lys Leu Lys Ser Thr Met Gln Gln Gln Glu Arg Asp Lys Asp Leu 85 90 95

Ile Glu Ser Leu Ser Glu Asp Arg Ala Arg Leu Leu Glu Glu Lys Lys 100 105 110

Lys Leu Glu Glu Glu Val Ser Lys Leu Arg Ser Ser Ser Phe Val Pro 115 120 125

Ser Pro Tyr Val Ala Thr Ala Pro Glu Leu Tyr Gly Ala Cys Ala Pro

140

135

130

Glu Leu Pro Gly Glu Ser Asp Arg Ser Ala Val Glu Thr Ala Asp Glu 145 150 155 Gly Arg Val Asp Ser Ala Met Glu Thr Ser Met Met Ser Val Gln Glu 170 Asn Ile His Met Leu Ser Glu Glu Lys Gln Arg Ile Met Leu Leu Glu 185 Arg Thr Leu Gln Leu Lys Glu Glu Glu Asn Lys Arg Leu Asn Gln Arg 195 200 Leu Met Ser Gln Ser Met Ser Ser Val Ser Ser Arg His Ser Glu Lys Ile Ala Ile Arg Asp Phe Gln Val Gly Asp Leu Val Leu Ile Ile Leu 230 235 Asp Glu Arg His Asp Asn Tyr Val Leu Phe Thr Val Ser Pro Thr Leu 245 250 Tyr Phe Leu His Ser Glu Ser Leu Pro Ala Leu Asp Leu Lys Pro Gly 265 Glu Gly Ala Ser Gly Ala Ser Arg Arg Pro Trp Val Leu Gly Lys Val 280 Met Glu Lys Glu Tyr Cys Gln Ala Lys Lys Ala Gln Asn Arg Phe Lys 295 Val Pro Leu Gly Thr Lys Phe Tyr Arg Val Lys Ala Val Ser Trp Asn 310 315 Lys Lys Val <210> 1440 <211> 459 <212> PRT <213> Homo sapiens <400> 1440 Thr Arg Trp Trp Gly Pro Val Leu Trp Ser Lys Ser Arg Pro Pro Gly 10

Arg Thr Arg Gly Pro Ser Gly Trp Arg Val Gly Leu Thr Arg Thr Ser

25

20

Arg	Pro	Ala 35	Ser	Pro	Ser	Ala	Leu 40	Arg	Thr	Gly	Asp	Gly 45	Ser	Ser	Arg
Pro	Gly 50	Thr	Pro	Pro	Ala	Ser 55	Pro	Arg	Val	Phe	Glu 60	Val	Arg	Gly	Gly
Ser 65	Gly	Ala	Ser	Ala	Arg 70	Arg	Ser	Ala	Arg	Ser 75	Leu	Pro	Ala	Leu	Glu 80
Ser	Ala	Ile	Met	Asp 85	Val	Leu	Ala	Glu	Ala 90	Asn	Gly	Thr	Phe	Ala 95	Leu
Asn	Leu	Leu	Lys 100	Thr	Leu	Gly	Lys	Asp 105	Asn	Ser	Lys	Asn	Val 110	Phe	Phe
Ser	Pro	Met 115	Ser	Met	Ser	Cys	Ala 120	Leu	Ala	Met	Val	Туг 125	Met	Gly	Ala
Lys	Gly 130	Asn	Thr	Ala	Ala	Gln 135	Met	Ala	Gln	Ile	Leu 140	Ser	Phe	Asn	Lys
Ser 145	Gly	Gly	Gly	_	Asp 150	Ile	His	Gln	Gly	Phe 155	Gln	Ser	Leu	Leu	Thr 160
Glu	Val	Asn	Lys	Thr 165	Gly	Thr	Gln	Tyr	Leu 170	Leu	Arg	Met	Ala	Asn 175	Arg
Leu	Phe	Gly	Glu 180	Lys	Ser	Cys	Asp	Phe 185	Leu	Ser	Ser	Phe	Arg 190	Asp	Ser
Cys	Gln	Lys 195	Phe	Tyr	Gln	Ala	Glu 200	Met	Glu	Glu	Leu	Asp 205	Phe	Ile	Ser
Ala	Val 210	Glu	Lys	Ser	Arg	Lys 215	His	Ile	Asn	Thr	Trp 220	Val	Ala	Glu	Lys
Thr 225	Glu	Gly	Lys				Leu		Ser	Pro 235	Gly	Ser	Val	Asp	Pro 240
Leu	Thr	Arg	Leu	Val 245	Leu	Val	Asn	Ala	Val 250	Tyr	Phe	Arg	Gly	Asn 255	Trp
Asp	Glu	Gln	Phe 260	Asp	Lys	Glu	Asn	Thr 265	Glu	Glu	Arg	Leu	Phe 270	Lys	Val
Ser	Lys	Asn 275	Glu	Glu	Lys	Pro	Val 280	Gln	Met	Met	Phe	Lys 285	Gln	Ser	Thr
Phe	Lys 290	Lys	Thr	туг	Ile	Gly 295	Glu	Ile	Phe	Thr	Gln 300	Ile	Leu	Val	Leu

Pro Tyr Val Gly Lys Glu Leu Asn Met Ile Ile Met Leu Pro Asp Glu 305 310 315 320

Thr Thr Asp Leu Arg Thr Val Glu Lys Glu Leu Thr Tyr Glu Lys Phe 325 330 335

Val Glu Trp Thr Arg Leu Asp Met Met Asp Glu Glu Glu Val Glu Val 340 345 350

Ser Leu Pro Arg Phe Lys Leu Glu Glu Ser Tyr Asp Met Glu Ser Val 355 360 365

Leu Arg Asn Leu Gly Met Thr Asp Ala Phe Glu Leu Gly Lys Ala Asp 370 375 380

Phe Ser Gly Met Ser Gln Thr Asp Leu Ser Leu Ser Lys Val Val His 385 390 395 400

Lys Ser Phe Val Glu Val Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala 405 410 415

Thr Ala Ala Ile Met Met Met Arg Cys Ala Arg Phe Val Pro Arg Phe 420 425 430

Cys Ala Asp His Pro Phe Leu Phe Phe Ile Gln His Ser Lys Thr Asn 435 440 445

Gly Ile Leu Phe Cys Gly Arg Phe Ser Ser Pro 450 455

<210> 1441

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1441

Leu Val Glu Ala Leu Lys Leu Gln Glu Gln Leu Lys Ala Pro Val Lys
1 5 10 15

Thr Leu Ser Glu Gly Ile Lys Arg Lys Leu Cys Phe Val Leu Ser Ile 20 25 30

Leu Gly Asn Pro Ser Val Val Leu Leu Asp Glu Leu Phe Thr Gly Met
35 40 45

Asp Pro Glu Gly Gln Gln Met Trp Gln Ile Leu Gln Ala Thr Ile 50 55 60

Lys Asn Gln Glu Arg Gly Ala Leu Leu Thr Thr His Tyr Met Ser Glu 65 70 75 80

Ala Lys Ser Leu Cys Asp Arg Val Ala Ile Met Val Ser Gly Thr Leu 85 90 95

Arg Cys Ile Gly Ser Ile Gln Gln Leu Lys Ser Leu Val Lys Ile Ile 100 105 110

Tyr

<210> 1442

<211> 839

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (291)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (295)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (683)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442

Ala Glu His Trp Gly Ala Ile Pro Pro Ala Gly Gly Gly Ala Val Gly
1 5 10 15

Ile Ser Glu Thr Phe Leu Gly Lys Lys Val Arg Thr Lys Thr Leu Ser 20 25 30

Glu Asp Asp Leu Lys Glu Ile Pro Ala Glu Gln Met Asp Phe Arg Ala 35 40 45

Asn Leu Gln Arg Gln Val Lys Pro Lys Thr Val Ser Glu Glu Glu Arg 50 55 60

Lys Val His Ser Pro Gln Gln Val Asp Phe Arg Ser Val Leu Ala Lys 65 70 75 80

Lys Gly Thr Ser Lys Thr Pro Val Pro Glu Lys Val Pro Pro Pro Lys

85 90 95 Pro Ala Thr Pro Asp Phe Arg Ser Val Leu Gly Gly Lys Lys Leu 105 Pro Ala Glu Asn Gly Ser Ser Ser Ala Glu Thr Leu Asn Ala Lys Ala 120 Val Glu Ser Ser Lys Pro Leu Ser Asn Ala Gln Pro Ser Gly Pro Leu 130 135 Lys Pro Val Gly Asn Ala Lys Pro Ala Glu Thr Leu Lys Pro Met Gly 150 Asn Ala Lys Pro Ala Glu Thr Leu Lys Pro Met Gly Asn Ala Lys Pro 170 165 Asp Glu Asn Leu Lys Ser Ala Ser Lys Glu Glu Leu Lys Lys Asp Val 180 185 Lys Asn Asp Val Asn Cys Lys Arg Gly His Ala Gly Thr Thr Asp Asn 200 Glu Lys Arg Ser Glu Ser Gln Gly Thr Ala Pro Ala Phe Lys Gln Lys Leu Gln Asp Val His Val Ala Glu Gly Lys Lys Leu Leu Leu Gln Cys 225 230 235 Gln Val Ser Ser Asp Pro Pro Ala Thr Ile Ile Trp Thr Leu Asn Gly 245 250 Lys Thr Leu Lys Thr Thr Lys Phe Ile Ile Leu Ser Gln Glu Gly Ser 265 Leu Cys Ser Val Ser Ile Glu Lys Ala Leu Pro Glu Asp Arg Gly Leu 275 Tyr Lys Xaa Val Ala Lys Xaa Asp Ala Gly Gln Ala Glu Cys Ser Cys Gln Val Thr Val Asp Asp Ala Pro Ala Ser Glu Asn Thr Lys Ala Pro 310 315 Glu Met Lys Ser Arg Arg Pro Lys Ser Ser Leu Pro Pro Val Leu Gly Thr Glu Ser Asp Ala Thr Val Lys Lys Lys Pro Ala Pro Lys Thr Pro 340 345 Pro Lys Ala Ala Met Pro Pro Gln Ile Ile Gln Phe Pro Glu Asp Gln

Lys Val Arg Ala Gly Glu Ser Val Glu Leu Phe Gly Lys Val Thr Gly Thr Gln Pro Ile Thr Cys Thr Trp Met Lys Phe Arg Lys Gln Ile Gln Glu Ser Glu His Met Lys Val Glu Asn Ser Glu Asn Gly Ser Lys Leu Thr Ile Leu Ala Ala Arg Gln Glu His Cys Gly Cys Tyr Thr Leu Leu Val Glu Asn Lys Leu Gly Ser Arg Gln Ala Gln Val Asn Leu Thr Val Val Asp Lys Pro Asp Pro Pro Ala Gly Thr Pro Cys Ala Ser Asp Ile Arg Ser Ser Ser Leu Thr Leu Ser Trp Tyr Gly Ser Ser Tyr Asp Gly Gly Ser Ala Val Gln Ser Tyr Ser Ile Glu Ile Trp Asp Ser Ala Asn Lys Thr Trp Lys Glu Leu Ala Thr Cys Arg Ser Thr Ser Phe Asn Val Gln Asp Leu Leu Pro Asp His Glu Tyr Lys Phe Arg Val Arg Ala Ile Asn Val Tyr Gly Thr Ser Glu Pro Ser Gln Glu Ser Glu Leu Thr Thr Val Gly Glu Lys Pro Glu Glu Pro Lys Asp Glu Val Glu Val Ser Asp Asp Asp Glu Lys Glu Pro Glu Val Asp Tyr Arg Thr Val Thr Ile Asn Thr Glu Gln Lys Val Ser Asp Phe Tyr Asp Ile Glu Glu Arg Leu Gly Ser Gly Lys Phe Gly Gln Val Phe Arg Leu Val Glu Lys Lys Thr Arg Lys Val Trp Ala Gly Lys Phe Phe Lys Ala Tyr Ser Ala Lys Glu Lys Glu Asn Ile Arg Gln Glu Ile Ser Ile Met Asn Cys Leu His His Pro

625 630 635 640

Lys Leu Val Gln Cys Val Asp Ala Phe Glu Glu Lys Ala Asn Ile Val 645 650 655

Met Val Leu Glu Ile Val Ser Gly Gly Glu Leu Phe Glu Arg Ile Ile 660 665 670

Asp Glu Asp Phe Glu Leu Thr Glu Arg Glu Xaa Ile Lys Tyr Met Arg 675 680 685

Gln Ile Ser Glu Gly Val Glu Tyr Ile His Lys Gln Gly Ile Val His 690 695 700

Leu Asp Leu Lys Pro Glu Asn Ile Met Cys Val Asn Lys Thr Gly Thr 705 710 715 720

Arg Ile Lys Leu Ile Asp Phe Gly Leu Ala Arg Arg Leu Glu Asn Ala 725 730 735

Gly Ser Leu Lys Val Leu Phe Gly Thr Pro Glu Phe Val Ala Pro Glu 740 745 750

Val Ile Asn Tyr Glu Pro Ile Gly Tyr Ala Thr Asp Met Trp Ser Ile 755 760 765

Gly Val Ile Cys Tyr Ile Leu Val Ser Gly Leu Ser Pro Phe Met Gly 770 775 780

Asp Asn Asp Asn Glu Thr Leu Ala Asn Val Thr Ser Ala Thr Trp Asp 785 790 795 800

Phe Asp Asp Glu Ala Phe Asp Glu Ile Ser Asp Asp Ala Lys Asp Phe 805 810 815

Ile Ser Asn Leu Leu Lys Lys Asp Met Lys Asn Arg Leu Asp Cys Thr 820 825 830

His Ala Phe Ser Ile His Gly 835

<210> 1443

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1443

Cys Ser Cys Thr Val Arg Ala Arg Arg Arg Leu Asn Arg Gly Leu Arg

Arg Lys Gln His Ser Leu Leu Lys Arg Leu Arg Lys Ala Lys Lys Glu 20 25 30 Ala Pro Pro Met Glu Lys Pro Glu Val Val Lys Thr His Leu Arg Asp 40 Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn 55 Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His 65 70 75 Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Gly Arg 90 Pro Gly Ile Gly Ala Thr His Ser Ser Arg Phe Ile Pro Leu Lys 100 105 <210> 1444 <211> 531 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (446) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (474) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (502) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (504)

<223> Xaa equals any of the naturally occurring L-amino acids

Glu Lys Ser Val Gln Xaa Ser Lys Arg Glu Ser Val Ser His Arg Ser Pro Ser Pro Glu Pro Ile Tyr Asn Ser Glu Gly Lys Arg Leu Asn Thr 25 Arg Glu Phe Arg Thr Arg Lys Leu Glu Glu Glu Arg His Asn Leu Ile Thr Glu Met Val Ala Leu Asn Pro Asp Phe Lys Pro Pro Ala Asp Tyr Lys Pro Pro Ala Thr Arg Val Ser Asp Lys Val Met Ile Pro Gln 70 75 Asp Glu Tyr Pro Glu Ile Asn Phe Val Gly Leu Leu Ile Gly Pro Arg 85 90 Gly Asn Thr Leu Lys Asn Ile Glu Lys Glu Cys Asn Ala Lys Ile Met 100 Ile Arg Gly Lys Gly Ser Val Lys Glu Gly Lys Val Gly Arg Lys Asp 120 Gly Gln Met Leu Pro Gly Glu Asp Glu Pro Leu His Ala Leu Val Thr 135 Ala Asn Thr Met Glu Asn Val Lys Lys Ala Val Glu Gln Ile Arg Asn 145 150 155 Ile Leu Lys Gln Gly Ile Glu Thr Pro Glu Asp Gln Asn Asp Leu Arg Lys Met Gln Leu Arg Glu Leu Ala Arg Leu Asn Gly Thr Leu Arg Glu 185 Asp Asp Asn Arg Ile Leu Arg Pro Trp Gln Ser Ser Glu Thr Arg Ser 195 200 205 Ile Thr Asn Thr Thr Val Cys Thr Lys Cys Gly Gly Ala Gly His Ile 215 Ala Ser Asp Cys Lys Phe Gln Arg Pro Gly Asp Pro Gln Ser Ala Gln Asp Lys Ala Arg Met Asp Lys Glu Tyr Leu Ser Leu Met Ala Glu Leu 245 250

Gly Glu Ala Pro Val Pro Ala Ser Val Gly Ser Thr Ser Gly Pro Ala

265

260

Thr Thr Pro Leu Ala Ser Ala Pro Arg Pro Ala Ala Pro Ala Asn Asn 275 280 285

Pro Pro Pro Pro Ser Leu Met Ser Thr Thr Gln Ser Arg Pro Pro Trp
290 295 300

Met Asn Ser Gly Pro Ser Glu Ser Arg Pro Tyr His Gly Met His Gly 305 310 315 320

Gly Gly Pro Gly Gly Pro Gly Gly Pro His Ser Phe Pro His Pro 325 330 335

Leu Pro Ser Leu Thr Gly Gly His Gly Gly His Pro Met Gln His Asn 340 345 350

Pro Asn Gly Pro Pro Pro Pro Met Gln Pro Pro Pro Pro Pro Met 355 360 365

Asn Gln Gly Pro His Pro Pro Gly His His Gly Pro Pro Pro Met Asp 370 375 380

Gln Tyr Leu Gly Ser Thr Pro Val Gly Ser Gly Val Tyr Arg Leu His 385 390 395 400

Gln Gly Lys Gly Met Met Pro Pro Pro Pro Met Gly Met Met Pro Pro 405 410 415

Pro Pro Pro Pro Ser Gly Gln Pro Pro Pro Pro Pro Ser Gly Pro 420 425 430

Leu Pro Pro Trp Gln Gln Gln Gln Gln Pro Pro Pro Xaa Pro Pro 435 440 445

Pro Ser Ser Ser Met Ala Ser Ser Thr Pro Leu Pro Trp Gln Gln Asn 450 460

Thr Thr Thr Thr Thr Ser Ala Gly Xaa Gly Ser Ile Pro Pro Trp 465 470 475 480

Gln Gln Gln Ala Ala Ala Ala Ser Pro Gly Ala Pro Gln Met 485 490 495

Gln Gly Asn Pro Thr Xaa Gly Xaa Met Ala Leu Leu Gln Trp Ile Ser 500 505 510

Thr Trp Glu Val Arg Leu Trp Ala Leu Gly Ser Ile Ala Cys Ile Lys
515 520 525

Glu Lys Val

<210> 1445

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1445

Ser Thr Cys Arg Val Val Glu Val Gly Lys Gln Gln Gly Thr Leu Tyr

1 5 10 15

Asn Ala Arg Gln Leu Gln Tyr Gly Lys Asn Gly Pro Gly Pro Trp Asp 20 25 30

Lys Ile Arg Val Val Leu Thr Pro Arg Gly Arg Gly Gln Pro Ala Phe 35 40 45

Arg Val Ala Ser Ser Val Pro Leu Gln Ser Asp Cys Val His Leu Val
50 55 60

Gln Leu Met Ser Glu Ser Pro Ala Leu Gly Tyr Phe Ile Leu Val Arg
65 70 75 80

Thr Leu Thr Ser His Ile Gly Ser Ile Asn Ser Phe Gly Lys Glu Leu
85 90 95

Ile Ser Phe

<210> 1446

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1446

Gln Pro Pro Gln Thr Phe Trp Gln Ala Leu Gln Leu Cys Tyr Phe Ile 1 5 10

Gln Leu Ile Leu Gln Ile Glu Ser Asn Gly His Ser Val Ser Phe Gly 20 25 30

Arg Met Asp Gln Tyr Leu Tyr Pro Tyr Tyr Arg Arg Asp Val Glu Leu 35 40 45

Asn Gln Thr Leu Asp Arg Glu His Ala Ile Glu Met Cys Ile Ala Ala 50 55 60

Gly

65

<210> 1447 <211> 189 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids Tyr Cys Ser Ala Ala Met Ala Glu Pro Gln Pro Pro Ser Gly Gly Leu Thr Asp Glu Ala Ala Leu Ser Cys Cys Ser Asp Ala Asp Pro Ser Thr 25 Lys Asp Phe Leu Leu Gln Gln Thr Met Leu Arg Val Lys Asp Pro Lys 40 Lys Ser Leu Asp Phe Tyr Thr Arg Val Leu Gly Met Thr Leu Ile Gln 55 Lys Cys Asp Phe Pro Ile Met Lys Phe Ser Leu Tyr Phe Leu Ala Tyr Glu Asp Lys Asn Asp Ile Pro Lys Glu Lys Asp Glu Lys Ile Ala Trp 90 Ala Leu Ser Arg Lys Ala Thr Leu Glu Leu Thr His Asn Trp Gly Thr 100 105 Glu Asp Asp Xaa Thr Gln Ser Tyr His Asn Gly Asn Ser Asp Pro Arg 120 Gly Phe Gly His Ile Gly Ile Ala Val Pro Asp Val Tyr Ser Ala Cys 130 135 Lys Arg Phe Glu Glu Leu Gly Val Lys Phe Val Lys Lys Pro Asp Asp 145 150 155 160 Gly Lys Met Lys Gly Leu Ala Phe Ile Gln Asp Pro Asp Gly Tyr Trp

170

185

165

180

Ile Glu Ile Leu Asn Pro Asn Lys Met Ala Thr Leu Met

<210> 1448 <211> 219 <212> PRT

<213> Homo sapiens

<400> 1448

Phe Glu Glu Arg Tyr Thr Phe Glu Ile Pro Phe Leu Glu Ala Gln Arg

1 5 10 15

Arg Thr Leu Leu Thr Val Val Asp Phe Asp Lys Phe Ser Arg His
20 25 30

Cys Val Ile Gly Lys Val Ser Val Pro Leu Cys Glu Val Asp Leu Val 35 40 45

Lys Gly Gly His Trp Trp Lys Ala Leu Ile Pro Ser Ser Gln Asn Glu 50 55 60

Val Glu Leu Gly Glu Leu Leu Leu Ser Leu Asn Tyr Leu Pro Ser Ala 65 70 75 80

Gly Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr
85 90 95

Asp Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His 100 105 110

Gly Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr 115 120 125

Ile Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu 130 135 140

Glu Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met 145 150 155 160

Lys Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser 165 170 175

Ser Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His 180 185 190

Arg Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys 195 200 205

Asp Arg Val Ser Pro Ala Ser Leu Glu Val Thr 210 215

<210> 1449 <211> 44 <212> PRT <213> Homo sapiens <400> 1449 Asp Trp Val Phe Lys Leu Ala Phe Val Asn Leu Ile Ala Leu Arg Leu Pro Ser Asn Glu Lys Lys Ser Gln Asn Phe Tyr Leu Val Phe Val His 20 Phe Leu Leu Lys Cys Asn His Met Ile Leu Val Cys 40 <210> 1450 <211> 272 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (183) <223> Xaa equals any of the naturally occurring L-amino acids Ser Thr Pro Cys Trp Pro Leu Pro Pro Val Trp Leu Gly Cys Gly Glu 10 Met Cys Leu Cys Val Gln Val Pro Glu Arg Asp Ser Val Ser Ser Val 25 Ser Ser Ala Thr Ser Ser Ser Ser Ser Ala His Ser Val Asp Ser Glu 35 45 40 Asp Met Tyr Ala Asp Leu Ala Ser Pro Val Ser Ser Ala Ser Ser Arg 55 Ser Pro Ala Pro Ala Gln Thr Arg Lys Glu Lys Gly Lys Ser Lys Lys

Pro Ser Thr Pro Gln Gln Ala Pro Pro Gly Gln Pro Gln Gln Gly Thr

Glu Asp Gly Val Lys Glu Glu Lys Arg Lys Arg Asp Ser Ser Thr Gln

Pro Pro Lys Ser Ala Lys Pro Pro Ala Gly Gly Lys Ser Ser Gln Gln

105

90

85

100

115 120 125

Phe Val Ala His Lys Glu Ile Lys Leu Thr Leu Leu Asn Lys Ala Ala 130 135 140

Asp Lys Gly Ser Arg Lys Arg Tyr Glu Pro Ser Asp Lys Asp Arg Gln 145 150 155 160

Ser Pro Pro Pro Ala Lys Arg Pro Asn Thr Ser Pro Asp Arg Gly Ser

Arg Asp Arg Lys Ser Gly Xaa Arg Leu Gly Ser Pro Lys Pro Glu Arg 180 185 190

Gln Arg Gly Gln Asn Ser Lys Ala Pro Ala Ala Pro Ala Asp Arg Lys 195 200 205

Arg Gln Leu Ser Pro Gln Ser Lys Ser Ser Ser Lys Val Thr Ser Val 210 215 220

Pro Gly Lys Ala Ser Asp Pro Gly Ala Ala Ser Thr Lys Ser Gly Lys 225 230 235 240

Ala Ser Thr Leu Ser Arg Arg Glu Glu Leu Leu Lys Gln Leu Lys Ala 245 250 255

Val Glu Asp Ala Ile Ala Arg Lys Arg Ala Lys Ile Pro Gly Lys Ala 260 265 270

<210> 1451

<211> 164

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (150)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1451

Val Met Ala Ala Cys Arg Tyr Cys Cys Ser Cys Leu Arg Leu Arg Pro 1 5 10 15

Leu Ser Asp Gly Pro Phe Leu Leu Pro Arg Arg Asp Arg Ala Leu Thr 20 25 30

Gln Leu Gln Val Arg Ala Leu Trp Ser Ser Ala Gly Ser Arg Ala Val
35 40 45

Ala Val Asp Leu Gly Asn Arg Lys Leu Glu Ile Ser Ser Gly Lys Leu 50 55 60

Ala Arg Phe Ala Asp Gly Ser Ala Val Val Gln Ser Gly Asp Thr Ala 65 70 75 80

Met Pro Leu Val Val Asp Tyr Arg Gln Lys Ala Ala Ala Ala Gly Arg 100 105 110

Ile Pro Thr Asn Tyr Leu Arg Arg Glu Xaa Gly Thr Ser Asp Lys Glu 115 120 125

Ile Leu Thr Ser Arg Ile Ile Asp Arg Ser Ile Arg Pro Leu Phe Xaa 130 135 140

Ala Gly Tyr Phe Tyr Xaa Thr Gln Val Leu Cys Asn Leu Leu Ala Val 145 150 155 160

Asp Gly Val Asn

<210> 1452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 1452

Ala Asp Cys Val Phe Val Glu Asp Val Ala Val Val Cys Glu Glu Thr
1 5 10 15

Ala Leu Ile Thr Arg Pro Gly Ala Pro Ser Arg Arg Lys Glu Val Asp 20 25 30

Met Met Lys Glu Ala Leu Glu Lys Leu Gln Leu Asn Ile Val Glu Met 35 40 45

Lys Asp Glu Asn Ala Thr Leu Asp Gly Gly Asp Val Leu Phe Thr Gly 50 60

Arg Glu Phe Phe Val Gly Leu Ser Lys Arg Thr Asn Gln Arg Gly Ala
65 70 75 80

Glu Ile Leu Ala Asp Thr Phe Lys Asp Tyr Ala Val Ser Thr Val Pro 85 90 · 95

Val Ala Asp Gly Leu His Leu Lys Ser Phe Cys Ser Met Ala Gly Pro 100 105 110

Asn Leu Ile Ala Ile Gly Ser Ser Glu Ser Ala Gln Lys Ala Leu Lys 115 120 125

Ile Met Gln Gln Met Ser Asp His Arg Tyr Asp Lys Leu Thr Val Pro 130 135 140

Asp Asp Ile Ala Ala Asn Cys Ile Tyr Leu Asn Ile Pro Asn Lys Gly
145 150 155 160

His Val Leu Leu His Arg Thr Pro Glu Glu Tyr Pro Glu Ser Ala Lys
165 170 175

Val Tyr Glu Lys Leu Lys Asp His Met Leu Ile Pro Val Ser Met Ser 180 185 190

Glu Leu Glu Lys Val Asp Gly Leu Leu Thr Cys Cys Gln Phe 195 200 205

<210> 1453

<211> 645

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (608)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1453

Ala His Ala Ser Gly Lys Lys Pro Pro Asn Arg Pro Gly Ile Thr Phe

1 5 10 15

Glu Ile Gly Ala Arg Leu Glu Ala Leu Asp Tyr Leu Gln Lys Trp Tyr
20 25 30

Pro	Ser	Arg 35	Ile	Glu	Lys	Ile	Asp 40	туг	Glu	Glu	Gly	Lys 45	Met	Leu	Val
His	Phe 50	Glu	Arg	Trp	Ser	His 55	Arg	Tyr	Asp	Glu	Trp 60	Ile	Tyr	Trp	Asp
Ser 65	Asn	Arg	Leu	Arg	Pro 70	Leu	Glu	Arg	Pro	Ala 75	Leu	Arg	Lys	Glu	Gly 80
Leu	Lys	Asp	Glu	Glu 85	Asp	Phe	Phe	Asp	Phe 90	Lys	Ala	Gly	Glu	Glu 95	Val
Leu	Ala	Arg	Trp 100	Thr	Asp	Cys	Arg	Туг 105	Tyr	Pro	Ala	Lys	11e 110	Glu	Ala
Ile	Asn	Lys 115	Glu	Gly	Thr	Phe	Thr 120	Val	Gln	Phe	Tyr	Asp 125	Gly	Val	Ile
Arg	Cys 130	Leu	Lys	Arg	Met	His 135	Ile	Lys	Ala	Met	Pro 140	Glu	Asp	Ala	Lys
Gly 145	Gln	Asp	Trp	Ile	Ala 150	Leu	Val	Lys	Ala	Ala 155	Ala	Ala	Ala	Ala	Ala 160
Lys	Asn	Lys	Thr	Gly 165	Ser	Lys	Pro	Arg	Thr 170	Ser	Ala	Asn	Ser	Asn 175	Lys
Asp	Lys	Asp	Lys 180	Asp	Glu	Arg	Lys	Trp 185	Phe	Lys	Val	Pro	Ser 190	Lys	Lys
Glu	Glu	Thr 195	Ser	Thr	Cys	Ile	Ala 200	Thr	Pro	Asp	Val	Glu 205	Lys	Lys	Glu
Asp	Leu 210	Pro	Thr	Ser	Ser	Glu 215	Thr	Phe	Gly	Leu	His 220	Val	Glu	Asn	Val
Pro 225	Lys	Met	Val	Phe	Pro 230	Gln	Pro	Glu	Ser	Thr 235	Leu	Ser	Asn	Lys	Arg 240
Lys	Asn	Asn	Gln	Gly 245	Asn	Ser	Phe	Gln	Ala 250	Lys	Arg	Ala	Arg	Leu 255	Asn
Lys	Ile	Thr	Gly 260	Leu	Leu	Ala	Ser	Lys 265	Ala	Val	Gly	Val	Asp 270	Gly	Ala
Glu	Lys	Lys 275	Glu	Asp	Tyr	Asn	Glu 280	Thr	Ala	Pro	Met	Leu 285	Glu	Gln	Ala
Ile	Ser	Pro	Lys	Pro	Gln	Ser	Gln	Lys	Lys	Asn	Glu	Ala	Asp	Ile	Ser

Ser 305	Ser	Ala	Asn	Thr	Gln 310	Lys	Pro	Ala	Leu	Leu 315	Ser	Ser	Thr	Leu	Ser 320
Ser	Gly	Lys	Ala	Arg 325	Ser	Lys	Lys	Cys	Lys 330	His	Glu	Ser	Gly	Asp 335	Ser
Ser	Gly	Cys	Ile 340	Lys	Pro	Pro	Lys	Ser 345	Pro	Leu	Ser	Pro	Glu 350	Leu	Ile
Gln	Val	Glu 355	Asp	Leu	Thr	Leu	Val 360	Ser	Gln	Leu	Ser	Ser 365	Ser	Val	Ile
Asn	Lys 370	Thr	Ser	Pro	Pro	Gln 375	Pro	Val	Asn	Pro	Pro 380	Arg	Pro	Phe	Lys
His 385	Ser	Glu	Arg	Arg	Arg 390	Arg	Ser	Gln	Arg	Leu 395	Ala	Thr	Leu	Pro	Met 400
Pro	Asp	Asp	Ser	Val 405	Glu	Lys	Val	Ser	Ser 410	Pro	Ser	Pro	Ala	Thr 415	Asp
Gly	Lys	Val	Phe 420	Ser	Ile	Ser	Ser	Gln 425	Asn	Gln	Gln	Glu	Ser 430	Ser	Val
Pro	Glu	Val 435	Pro	Asp	Val	Ala	His 440	Leu	Pro	Leu	Glu	Lys 445	Leu	Gly	Pro
Cys	Leu 450	Pro	Leu	Asp	Leu	Ser 455	Arg	Gly	Ser	Glu	Val 460	Thr	Ala	Pro	Val
Ala 465	Ser	Asp	Ser	Ser	Tyr 470	Arg	Asn	Glu	Cys	Pro 475	Arg	Ala	Glu	Lys	Glu 480
Asp	Thr	Gln	Met	Leu 485	Pro	Asn	Pro	Ser	Ser 490	Lys	Ala	Ile	Ala	Asp 495	Gly
Arg	Gly	Ala	Pro 500	Ala	Ala	Ala	Gly	Ile 505	Ser	Lys	Thr	Glu	Lys 510	Lys	Val
Lys	Leu	Glu 515	Asp	Lys	Ser	Ser	Thr 520	Ala	Phe	Gly	Lys	Arg 525	Lys	Glu	Lys
Asp	Lys 530	Glu	Arg	Arg	Glu	Lys 535	Arg	Asp	Lys	Asp	His 540	Tyr	Arg	Pro	Lys
Gln 545	Lys	Lys	Lys	Lys	Lys 550	Lys	Lys	Lys	Lys	Ser 555	Lys	Gln	His	Asp	Туг 560
Ser	Asp	Tyr	Glu	Asp 565	Ser	Ser	Leu	Glu	Phe 570	Leu	Glu	Arg	Cys	Ser 575	Ser

Pro Leu Thr Arg Ser Ser Gly Ser Ser Leu Ala Ser Arg Ser Met Phe 580 585 590

Thr Glu Lys Thr Thr Thr Tyr Gln Tyr Pro Arg Ala Ile Leu Ser Xaa 595 600 605

Asp Leu Ser Gly Glu Ser Met Cys Asn His Val Met Val Lys Thr Arg 610 620

Leu Thr Ile Pro Lys Cys Val Thr Glu Asn Lys Thr Tyr Ser Val Lys 625 630 635 640

Ser Met Arg Phe Lys 645

<210> 1454

<211> 69

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1454

Leu Val Ile Tyr Ser Trp His Xaa Phe Phe Ser Phe Gly Phe Ala Trp
1 5 10 15

Leu Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys Tyr 20 25 30

Arg Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp Val 35 40 45

Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly Leu 50 55 60

Met Thr Val Ser Leu 65

<210> 1455

<211> 230

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (150) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (152) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1455 Leu Ala Gly Pro Arg Arg Trp Arg Val Ser Arg Pro Glu Ala Tyr Arg Ser Arg Trp Arg Gly Arg Ala Gly Gln Gly Phe Gly Leu Arg Arg 25 Glu Met Ala Ala Gly Gly Arg Met Glu Asp Gly Ser Leu Asp Ile Thr 40 35 Gln Ser Ile Glu Asp Asp Pro Leu Leu Asp Ala Gln Leu Leu Pro His 55 His Ser Leu Gln Ala His Phe Arg Pro Arg Phe His Pro Leu Pro Thr Val Ile Ile Val Asn Leu Leu Trp Phe Ile His Leu Val Phe Val Val 85 90 Leu Ala Phe Leu Thr Gly Val Leu Cys Ser Tyr Pro Asn Pro Asn Glu 100 Asp Lys Cys Pro Gly Asn Tyr Thr Asn Pro Leu Lys Val Gln Thr Val 120 Ile Ile Leu Gly Lys Val Ile Leu Trp Ile Leu His Leu Leu Glu 135 140 Cys Tyr Ile Gln Tyr Xaa His Xaa Lys Ile Arg Asn Arg Gly Tyr Asn 145 Leu Ile Tyr Arg Ser Thr Arg His Leu Lys Arg Leu Ala Leu Met Ile 170 Gln Ser Ser Gly Asn Thr Val Leu Leu Leu Ile Leu Cys Met Gln His 180 185 Ser Phe Pro Glu Pro Gly Arg Leu Tyr Leu Asp Leu Ile Leu Ala Ile 195 200

Leu Ala Leu Glu Leu Ile Cys Ser Leu Ile Cys Leu Leu Ile Tyr Thr

210 215 220

Val Lys Ile Pro Glu Ile 225 230

<210> 1456

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1456

Phe Phe Phe Phe Ser Ile Ile Phe Xaa Gln Lys Gly Lys Lys Pro 1 5 10 15

Phe Lys Ser Leu Arg Asn Leu Lys Ile Asp Leu Asp Leu Thr Ala Glu 20 25 30

Gly Asp Leu Asn Ile Ile Met Ala Leu Ala Glu Lys Ile Lys Pro Gly 35 40 45

Leu His Ser Phe Ile Phe Gly Arg Pro Phe Tyr Thr Ser Val Gln Glu 50 55 60

Arg Asp Val Leu Met Thr Phe 65 70

<210> 1457

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1457

Glu Tyr Asn Ser Val Asn Ala Asn Met Ile Ala Thr Leu Phe Thr Ser 1 5 10 15

Leu Leu Leu Arg Pro Pro Pro Asn Leu Met Ala Arg Gln Thr Pro Ser 20 25 30

Asp Arg Gln Arg Ala Ile Gln Phe Leu Leu Gly Phe Leu Leu Gly Ser 35 40 45

Glu Glu Asp

50

<210> 1458

<211> 260

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1458

Pro Arg Leu Xaa Gly Asp Phe Val Ile Arg Pro Pro Gly Ser Gly Glu
1 5 10 15

Lys Glu Pro His Pro Phe Ser Leu Cys His His Phe Gly His Pro Ala 20 25 30

Gly Leu Val Leu Gly Phe Ala Leu Thr Ser Arg Lys Asp Ala Asn Pro 35 40 45

Ser Leu Thr Pro Ala Arg Ala Ala Thr Cys Leu Cys Arg Gly Asp Pro 50 55 60

Ser Leu Met Thr Leu Arg Cys Leu Glu Pro Ser Gly Asn Gly Glu 65 70 75 80

Gly Thr Arg Xaa Gln Trp Gly Thr Ala Gly Ser Ala Glu Glu Pro Ser 85 90 95

Pro Gln Ala Ala Arg Leu Ala Lys Ala Leu Arg Glu Leu Gly Gln Thr 100 105 110

Gly Trp Tyr Trp Gly Ser Met Thr Val Asn Glu Ala Lys Glu Lys Leu 115 120 125

Lys Glu Ala Pro Glu Gly Thr Phe Leu Ile Arg Asp Ser Ser His Ser 130 135 140

Asp Tyr Leu Leu Thr Ile Ser Val Lys Thr Ser Ala Gly Pro Thr Asn 145 150 155 160

Leu Arg Ile Glu Tyr Gln Asp Gly Lys Phe Arg Leu Asp Ser Ile Ile

165 170 175 Cys Val Lys Ser Lys Leu Lys Gln Phe Asp Ser Val Val His Leu Ile 185 Asp Tyr Tyr Val Gln Met Cys Lys Asp Lys Arg Thr Gly Pro Glu Ala 200 Pro Arg Asn Gly Thr Val His Leu Tyr Leu Thr Lys Pro Leu Tyr Thr 210 215 220 Ser Ala Pro Ser Leu Gln His Leu Cys Arg Leu Thr Ile Asn Lys Cys 230 235 Thr Gly Ala Ile Trp Gly Leu Pro Leu Pro Thr Arg Leu Lys Asp Tyr 250 Leu Gly Arg Ile 260 <210> 1459 <211> 145 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids Ala Glu Arg Ser Thr Cys Ser Arg Ser Arg Xaa Ala Arg Ala Ala Ala Pro Leu Pro Gly Gly Lys Gly Ser Gly Ile Phe Asp Glu Ser Thr Pro Val Gln Thr Arg Gln His Leu Asn Pro Pro Gly Gly Lys Thr Ser Asp 40 Ile Phe Gly Ser Pro Val Thr Ala Thr Ser Arg Leu Ala His Pro Asn 50 Lys Pro Lys Asp His Val Phe Leu Cys Glu Gly Glu Pro Lys Ser

Asp Leu Lys Ala Ala Arg Ser Ile Pro Ala Gly Ala Glu Pro Gly Glu

```
Lys Gly Ser Ala Arg Lys Ala Gly Pro Ala Lys Glu Gln Glu Pro Met
                              105
Pro Thr Val Asp Ser His Glu Pro Arg Leu Gly Pro Arg Pro Arg Ser
                         120
His Asn Lys Val Leu Asn Pro Pro Gly Gly Lys Ser Ser Ile Ser Phe
Tyr
145
<210> 1460
<211> 113
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1460
Pro Ser Ile Tyr Asp Ile Leu Leu Leu Ile Ile Leu Trp Leu Xaa Ser
1 5 10
Arg Met Asp Val Glu Ser Cys Ser Gln Arg Glu Asp Arg Leu Lys Arg
            20
Ala Kaa Ser Ala Lys Ser Ala Asn Ala Cys Asn Asn Cys Lys Cys Ser
Val Ala Thr Cys Arg Leu Asn Ser Ala Gly Pro Glu Phe Cys Ile Arg
            55
Gly Leu Gly Tyr Ser Pro Asp Lys Gly Trp Arg His Arg Met Leu Glu
65
              70 75
Phe Ser Gly His Ser Gly Lys Gly Pro Leu Cys Arg Ala Val Thr Val
Ser Cys Pro Ile Gly Pro Phe Pro Pro Val Lys Cys Lys Ser Gln Glu
                             105
```

Ser

<210> 1461

<211> 268

<212> PRT

<213> Homo sapiens

<400> 1461

Thr Thr Phe Arg Ala Lys Pro Gly Cys Cys Cys Ser Gly Glu Asp
1 5 10 15

Arg Gly Thr Ala Met Ala Glu Ser Ser Glu Ser Phe Thr Met Ala Ser 20 25 30

Ser Pro Ala Gln Arg Arg Gly Asn Asp Pro Leu Thr Ser Ser Pro 35 40 45

Gly Arg Ser Ser Arg Arg Thr Asp Ala Leu Thr Ser Ser Pro Gly Arg
50 55 60

Asp Leu Pro Pro Phe Glu Asp Glu Ser Glu Gly Leu Leu Gly Thr Glu 65 70 75 80

Gly Pro Leu Glu Glu Glu Glu Asp Gly Glu Glu Leu Ile Gly Asp Gly
85 90 95

Met Glu Arg Asp Tyr Arg Ala Ile Pro Glu Leu Asp Ala Tyr Glu Ala 100 105 110

Glu Gly Leu Ala Leu Asp Asp Glu Asp Val Glu Glu Leu Thr Ala Ser 115 120 125

Gln Arg Glu Ala Ala Glu Arg Ala Met Arg His Val Thr Gly Arg Leu 130 135 140

Ala Gly Ala Trp Ala Ala Cys Ala Val Gly Ser Cys Met Thr Ala Met 145 150 155 160

Arg Arg Thr Arg Ser Ala Leu Pro Ala Ser Ala Ala Ser Gly Ala Ala 165 170 175

Thr Glu Asp Gly Glu Glu Asp Glu Glu Met Ile Glu Ser Ile Glu Asn 180 185 190

Leu Glu Asp Leu Lys Gly His Ser Val Arg Glu Trp Val Ser Met Ala 195 200 205

Gly Pro Arg Leu Glu Ile His His Arg Phe Lys Asn Phe Leu Arg Thr

210 215 220

His Val Asp Ser His Gly His Asn Val Phe Lys Glu Arg Ile Ser Asp 225 230 235 240

Met Cys Lys Glu Asn Arg Glu Ser Leu Val Val Asn Tyr Glu Asp Thr 245 250 255

Gly Ser Gln Gly Ala Arg Ala Gly Leu Leu Pro Ala 260 265

<210> 1462

<211> 393

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (149)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1462

Lys Ile Arg Lys Gln Ile Asn Ile Asn Pro Phe Val Phe Lys His
1 5 10 15

Ile Ser Asn Leu Lys Ser Met Asp His Phe Asp Asp Ile Gly Pro Ser
20 25 30

Val Val Met Ala Ser Pro Gly Met Met Gln Ser Gly Leu Ser Arg Glu 35 40 45

Leu Phe Glu Ser Trp Cys Thr Asp Lys Arg Asn Gly Val Ile Ile Ala 50 55 60

Gly Tyr Cys Val Glu Gly Thr Leu Ala Lys His Ile Met Ser Glu Pro 65 70 75 80

Glu Glu Ile Thr Thr Met Ser Gly Gln Lys Leu Pro Leu Lys Met Ser 85 90 95

Val Asp Tyr Ile Ser Phe Ser Ala His Thr Asp Tyr Gln Gln Thr Ser 100 105 110

Glu Phe Ile Arg Ala Leu Lys Pro Pro His Val Ile Leu Val His Gly
115 120 125

Glu Gln Asn Glu Met Ala Arg Leu Lys Ala Ala Leu Ile Arg Glu Tyr 130 135 140

Glu 145	Asp	Asn	Asp	Xaa	Val 150	His	Ile	Glu	Val	His 155	Asn	Pro	Arg	Asn	Thr 160
Glu	Ala	Val	Thr	Leu 165	Asn	Phe	Arg	Gly	Glu 170	Lys	Leu	Ala	Lys	Val 175	Met
Gly	Phe	Leu	Ala 180	Asp	Lys	Lys	Pro	Glu 185	Gln	Gly	Gln	Arg	Val 190	Ser	Gly
Ile	Leu	Val 195	Lys	Arg	Asn	Phe	Asn 200	Туг	His	Ile	Leu	Ser 205	Pro	Cys	Asp
Leu	Ser 210	Asn	Tyr	Thr	Asp	Leu 215	Ala	Met	Ser	Thr	Val 220	Lys	Gln	Thr	Gln
Ala 225	Ile	Pro	Туr	Thr	Gly 230	Pro	Phe	Asn	Leu	Leu 235	Cys	туг	Gln	Leu	Gln 240
Lys	Leu	Thr	Gly	Asp 245	Val	Glu	Glu	Leu	Glu 250	Ile	Gln	Glu	Lys	Pro 255	Ala
Leu	Lys	Val	Phe 260	Lys	Asn	Ile	Thr	Val 265	Ile	Gln	Glu	Pro	Gly 270	Met	Val
Val	Leu	Glu 275	Trp	Leu	Ala	Asn	Pro 280	Ser	Asn	Asp	Met	Tyr 285	Ala	Asp	Thr
Val	Thr 290	Thr	Val	Ile	Leu	Glu 295	Val	Gln	Ser	Asn	Pro 300	Lys	Ile	Arg	Lys
Gly 305	Ala	Val	Gln	Lys	Val 310	Ser	Lys	Lys	Leu	Glu 315	Met	His	Val	Tyr	Ser 320
Lys	Arg	Leu	Glu	Ile 325	Met	Leu	Gln	Asp	Ile 330	Phe	Gly	Glu	Asp	Cys 335	Val
Ser	Val	Lys	Asp 340	Asp	Ser	Ile	Leu	Ser 345	Val	Thr	Val	Asp	Gly 350	Lys	Thr
Ala	Asn	Leu 355	Asn	Leu	Glu	Thr	Arg 360	Thr	Val	Glu	Cys	Glu 365	Glu	Gly	Ser
Glu	Asp 370	Asp	Glu	Ser	Leu	Arg 375	Glu	Met	Val	Glu	Leu 380	Ala	Ala	Gln	Arg
Leu 385	Tyr	Glu	Ala	Leu	Thr 390	Pro	Val	His							

<211> 163

<212> PRT <213> Homo sapiens

<400> 1463

Leu Leu Asp Phe Pro Ala Leu Pro Lys Phe Val Leu Ala Gln Ser Pro 1 5 10 15

Lys Ala Gly Lys Pro Ser Thr Met Thr Ser Met Thr Gln Ser Leu Arg
20 25 30

Glu Val Ile Lys Ala Met Thr Lys Ala Arg Asn Phe Glu Arg Val Leu 35 40 45

Gly Lys Ile Thr Leu Val Ser Ala Ala Pro Gly Lys Val Ile Cys Glu
50 55 60

Met Lys Val Glu Glu His Thr Asn Ala Ile Gly Thr Leu His Gly 65 70 75 80

Gly Leu Thr Ala Thr Leu Val Asp Asn Ile Ser Thr Met Ala Leu Leu 85 90 95

Cys Thr Glu Arg Gly Ala Pro Gly Val Ser Val Asp Met Asn Ile Thr 100 105 110

Tyr Met Ser Pro Ala Lys Leu Gly Glu Asp Ile Val Ile Thr Ala His 115 120 125

Val Leu Lys Gln Gly Lys Thr Leu Ala Phe Thr Ser Val Asp Leu Thr 130 135 140

Asn Lys Ala Thr Gly Lys Leu Ile Ala Gln Gly Arg His Thr Lys His 145 150 155 160

Leu Gly Asn

<210> 1464

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1464

Trp Cys Cys Phe Arg Thr Val Phe Ser Tyr Pro Phe Arg Leu Val Phe 1 5 10 15

Cys Met Arg His His Cys Lys Lys Ile Leu Ser Leu Gln Lys Tyr Phe 20 25 30 Ile Thr Lys Glu Gln Lys Gln Lys Lys Leu Lys Leu His Trp Leu Lys 35 40 45

Tyr Ser Phe Gln Gln Leu Ser Phe Leu Ser Thr Leu Met Ala Thr Pro 50 55 60

Pro Arg Val Glu Val Thr Val Val Cys Thr Gln Val Val Pro Ile Lys 65 70 75 80

Thr Pro Ser Phe Glu Pro Asn Tyr Val His Phe Val Ile Asp 85 90

<210> 1465

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1465

Gln Val Glu Ile His Tyr Xaa Phe Asp Thr Leu Ile Glu Trp Trp Arg 1 5 10 15

Glu Lys Asn Gly Ser Xaa Cys Ser Xaa Leu Ile Ile Val Leu Asp Ser 20 25 30

Glu Asn Ser Thr Pro Trp Val Lys Glu Val Arg Lys Ile Asn Asp Gln 35 40 45

Tyr Ile Ala Val Gln Gly Ala Glu Leu Ile Lys Thr Val Asp Ile Glu 50 60

Glu Ala Asp Pro Pro Gln Leu Gly Asp Phe Thr Lys Asp Trp Val Glu 65 70 75 80

Tyr Asn Cys Asn Ser Ser Asn Asn Ile Cys Trp Thr Glu Lys Gly Arg 85 90 95

Thr Val Lys Ala Val Tyr Gly Val Ser Lys Arg Trp Ser Asp Tyr Thr 100 105 110

Leu His Leu Pro Thr Gly Ser Asp Val Ala Lys His Trp Met Leu His
115 120 125

Phe Pro Arg Ile Thr Tyr Pro Leu Val His Leu Ala Asn Trp Leu Cys 130 135 140

Gly Leu Asn Leu Phe Trp Ile Cys Lys Thr Cys Phe Arg Cys Leu Lys 145 150 155 160

Arg Leu Lys Met Ser Trp Phe Leu Pro Thr Val Leu Asp Thr Gly Gln 165 170 175

Gly Phe Lys Leu Val Lys Ser 180

<210> 1466

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1466

Arg Asp Gly Val Trp Ser Val Gln Val Arg Gly Gln Gly Glu Val Glu

1 10 15

Asn Gly Arg Cys Ile Thr Lys Leu Glu Asn Met Gly Phe Arg Val Gly 20 25 30

Gln Gly Leu Ile Glu Arg Phe Thr Lys Asp Thr Ala Arg Phe Lys Asp 35 40 45

Glu Leu Asp Ile Met Lys Phe Ile Cys Lys Asp Phe Trp Thr Thr Val
50 60

Phe Lys Lys Gln Ile Asp Asn Leu Arg Thr Asn His Gln Gly Ile Tyr 65 70 75 80

Val Leu Gln Asp Asn Lys Phe Arg Leu Leu Thr Gln Met Ser Ala Gly
85 90 95

Lys Gln Tyr Leu Glu His Ala Ser Lys Tyr Leu Ala Phe Thr Cys Gly
100 105 110

Leu Ile Arg Gly Gly Leu Ser Asn Leu Gly Ile Lys Ser Ile Val Thr

115 120 125

Ala Glu Val Ser Ser Met Pro Ala Cys Lys Phe Gln Val Met Ile Gln 130 135 140

Lys Leu 145

<210> 1467

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1467

Ile Arg His Ser His Thr Gly Gln Gly Ser Cys Trp Val Ala Thr Leu 1 5 10 15

Ala Ser Ala Met Ile Pro Pro Ala Asp Ser Leu Leu Lys Tyr Asp Thr
20 25 30

Pro Val Leu Val Ser Arg Asn Thr Glu Lys Arg Ser Pro Lys Ala Arg 35 40 45

Leu Leu Lys Val Ser Pro Gln Gln Pro Gly Pro Ser Gly Ser Ala Pro 50 55 60

Gln Pro Pro Lys Thr Lys Leu Pro Ser Thr Pro Cys Val Pro Asp Pro 65 70 75 80

Thr Lys Gln Ala Glu Glu Ile Leu Asn Ala Ile Leu Pro Pro Arg Glu
85 90 95

Trp Val Glu Asp Thr Gln Leu Trp Ile Gln Gln Val Ser Ser Thr Pro 100 105 110

Ser Thr Arg Met Asp Val Val His Leu Gln Glu Gln Leu Asp Leu Lys 115 120 125

Leu Gln Gln Arg Gln Ala Arg Glu Thr Gly Ile Cys Pro Val Arg Arg 130 135 140

Asn Cys Ala Glu Arg Gly Leu Leu Leu Arg Val Arg Asp Glu Ile 165 170 175

Arg Met Thr Ile Ala Ala Tyr Gln Thr Leu Tyr Glu Ser Ser Val Ala 180 185 190 Phe Gly Met Arg Lys Ala Leu Gln Ala Glu Gln Gly Lys Ser Asp Met 195 200 205

Glu Arg Lys Ile Ala Glu Leu Glu Thr Glu Lys Arg Asp Leu Glu Arg 210 215 220

Gln Val Asn Glu Gln Lys Ala Lys Cys Glu Ala Thr Glu Lys Arg Glu 225 230 235 240

Ser Glu Arg Arg Gln Val Glu Glu Lys Lys His Asn Glu Glu Ile Gln
245 250 255

Phe Leu Lys Arg Thr Asn Gln Gln Leu Lys Ala Gln Leu Glu Gly Ile 260 265 270

Ile Ala Pro Lys Lys 275

<210> 1468

<211> 263

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1468

Arg Pro Ala Ala Ala Xaa Ser Gly Gly Thr Gly Ser Gly Arg Gly Ser 1 5 10 15

Arg Pro Glu Pro Ser Arg Ala Glu Pro Ser Arg Ser Gly Arg Arg 20 25 30

Pro Ala Arg Arg Ala Ala Thr Met Ser Val Phe Gly Lys Leu Phe Gly 35 40 45

Ala Gly Gly Gly Lys Ala Gly Lys Gly Gly Pro Thr Pro Gln Glu Ala
50 55 60

Ile Gln Arg Leu Arg Asp Thr Glu Glu Met Leu Ser Lys Lys Gln Glu 65 70 75 80

Phe Leu Glu Lys Lys Ile Glu Gln Glu Leu Thr Ala Ala Lys Lys His
85 90 95

Gly Thr Lys Asn Lys Arg Ala Ala Leu Gln Ala Leu Lys Arg Lys Lys

100 105 110

Arg Tyr Glu Lys Gln Leu Ala Gln Ile Asp Gly Thr Leu Ser Thr Ile 115 120 125

Glu Phe Gln Arg Glu Ala Leu Glu Asn Ala Asn Thr Asn Thr Glu Val 130 135 140

Leu Lys Asn Met Gly Tyr Ala Ala Lys Ala Met Lys Ala Ala His Asp 145 150 155 160

Asn Met Asp Ile Asp Lys Val Asp Glu Leu Met Gln Asp Ile Ala Asp 165 170 175

Gln Gln Glu Leu Ala Glu Glu Ile Ser Thr Ala Ile Ser Lys Pro Val 180 185 190

Gly Phe Gly Glu Glu Phe Asp Glu Asp Glu Leu Met Ala Glu Leu Glu 195 200 205

Glu Leu Glu Glu Glu Leu Asp Lys Asn Leu Leu Glu Ile Ser Gly
210 215 220

Pro Glu Thr Val Pro Leu Pro Asn Val Pro Ser Ile Ala Leu Pro Ser 225 230 235 240

Lys Pro Ala Lys Lys Lys Glu Glu Glu Asp Asp Asp Met Lys Glu Leu 245 250 255

Glu Asn Trp Ala Gly Ser Met 260

<210> 1469

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1469

Phe Arg Pro Trp Thr Leu Asp Leu Val Asp Glu Gly His Trp Pro Gly

10 15 Pro Arg Val Phe Gly Gly Arg Arg Gly Leu Ala Trp Val Pro Thr Gly 25 Cys Leu Thr Ser Ser Cys Ser Leu His Leu Gly Cys Val Gly Gln Gly 40 Leu Cys Cys His Ser Arg Asn Arg Phe Ser Ser Val Gly Leu Pro Phe 50 Leu His Pro Gly Leu Lys Trp Met Pro Asp Ala Asn Pro Ser Ser Gly His Val Gln Pro Ala Gly Gln Pro Arg Gly Ser Leu Ser Ser Arg Ala 90 Lys Asp Ser Arg Xaa Pro Phe Ser Leu Leu Ala Phe Leu Leu Cys Pro 100 105 Ala Val Ala Ala Gly Xaa Ser Ser Cys Ser Arg Arg Glu Thr Val Leú 120 Pro Leu Ser Pro Ser Leu Pro His Pro Ser Ser Cys Pro Gly Asn Leu 135 Glu Pro Leu Gly Ala Glu Leu Asp Gly Gly Pro Ala Ala Ser Met Cys 145 150 155 Thr Lys Arg Ser Pro Phe Gln Gly Lys Arg Thr Gly Trp Arg Met Glu 165 170 Gly Lys Pro Pro Arg Leu Arg Glu Leu Gln Glu Gly Thr Leu Pro Gly 185

<210> 1470

<211> 260

<212> PRT

<213> Homo sapiens

<400> 1470

Arg Lys Cys Leu Tyr Leu Val Ala Gly Lys Trp Glu Glu Arg Lys Val 1 5 10 15

Val Met Ala Ala Ile Ala Ala Ser Glu Val Leu Val Asp Ser Ala Glu 20 25 30 Glu Gly Ser Leu Ala Ala Ala Glu Leu Ala Ala Gln Lys Arg Glu 35 40 45

Gln Arg Leu Arg Lys Phe Arg Glu Leu His Leu Met Arg Asn Glu Ala 50 55 60

Arg Lys Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys 65 70 75 80

Leu Pro Ala Asn Trp Glu Ala Lys Lys Ala Arg Leu Glu Trp Glu Leu 85 90 95

Lys Glu Glu Lys Lys Glu Cys Ala Ala Arg Gly Glu Asp Tyr
100 105 110

Glu Lys Val Lys Leu Leu Glu Ile Ser Ala Glu Asp Ala Glu Arg Trp 115 120 125

Glu Arg Lys Lys Lys Arg Lys Asn Pro Asp Leu Gly Phe Ser Asp Tyr 130 135 140

Ala Ala Ala Gln Leu Arg Gln Tyr His Arg Leu Thr Lys Gln Ile Lys 145 150 155 160

Pro Asp Met Glu Thr Tyr Glu Arg Leu Arg Glu Lys His Gly Glu Glu 165 170 175

Phe Phe Pro Thr Ser Asn Ser Leu Leu His Gly Thr His Val Pro Ser 180 185 190

Thr Glu Glu Ile Asp Arg Met Val Ile Asp Leu Glu Lys Gln Ile Glu 195 200 205

Lys Arg Asp Lys Tyr Ser Arg Arg Pro Tyr Asn Asp Asp Ala Asp 210 215 220

Ile Asp Tyr Ile Asn Glu Arg Asn Ala Lys Phe Asn Lys Lys Ala Glu 225 230 235 240

Arg Phe Tyr Gly Lys Tyr Thr Ala Glu Ile Lys Gln Asn Leu Glu Arg
245 250 255

Gly Thr Ala Val 260

<210> 1471

<211> 121

<212> PRT

<213> Homo sapiens <400> 1471 Leu Val Lys Gly Met Thr Val Leu Glu Ala Val Leu Glu Ile Gln Ala 5 Ile Thr Gly Ser Arg Leu Leu Ser Met Val Pro Gly Pro Ala Arg Pro 25 Pro Gly Ser Cys Trp Asp Pro Thr Gln Cys Thr Arg Thr Trp Leu Leu 40 Ser His Thr Pro Arg Arg Trp Ile Ser Gly Leu Pro Arg Ala Ser Cys Arg Leu Gly Glu Glu Pro Pro Pro Leu Pro Tyr Cys Asp Gln Ala Tyr Gly Glu Glu Leu Ser Ile Arg His Arg Glu Thr Trp Ala Trp Leu 90 Ser Arg Thr Asp Thr Ala Trp Pro Gly Ala Pro Gly Val Lys Gln Ala 105 Arg Ile Leu Gly Glu Leu Leu Val 115 <210> 1472 <211> 298 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (89)

Pro Cys Ala Trp Arg Ala Ala Arg Gly Gly Pro Cys Ala Ala Pro Leu

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1472

15 10 Gly Leu Arg Glu Arg Gly Arg Val Ser Xaa Arg Leu Leu Gly Pro Ala 25 Ala Ala Arg Ala Leu Leu Gly Leu Pro Gly Arg Thr Leu Glu Ala 40 Ala Ser Gly Arg Ser Trp Leu Ala Ala Ala Arg Asp Arg Pro Ala Glu Pro Leu Phe Gly Arg Gly Glu Gly Ser Gln Ala Ser Gly Xaa Ala Gly Ala Ala Ala Glu Ala Pro Gly Xaa Gln Trp Gly Pro Ala Ser Thr Pro Ser Leu Tyr Glu Asn Pro Trp Thr Ile Pro Asn Met Leu Ser Met 100 105 Thr Arg Ile Gly Leu Ala Pro Val Leu Gly Tyr Leu Ile Ile Glu Glu 120 Asp Phe Asn Ile Ala Leu Gly Val Phe Ala Leu Ala Gly Leu Thr Asp 135 Leu Leu Asp Gly Phe Ile Ala Arg Asn Trp Ala Asn Gln Arg Ser Ala 145 150 Leu Gly Ser Ala Leu Asp Pro Leu Ala Asp Lys Ile Leu Ile Ser Ile 170 Leu Tyr Val Ser Leu Thr Tyr Ala Asp Leu Ile Pro Val Pro Leu Thr 185 Tyr Met Ile Ile Ser Arg Asp Val Met Leu Ile Ala Ala Val Phe Tyr 195 200 Val Arg Tyr Arg Thr Leu Pro Thr Pro Arg Thr Leu Ala Lys Tyr Phe 215 Asn Pro Cys Tyr Ala Thr Ala Arg Leu Lys Pro Thr Phe Ile Ser Lys 230 235 Val Asn Thr Ala Val Gln Leu Ile Leu Val Ala Ala Ser Leu Ala Ala 245 250 Pro Val Phe Asn Tyr Ala Asp Ser Ile Tyr Leu Gln Ile Leu Trp Cys 260 Phe Thr Ala Phe Thr Thr Ala Ala Ser Ala Tyr Ser Tyr Tyr His Tyr 275 280 285

Gly Arg Lys Thr Val Gln Val Ile Lys Asp 290 295

<210> 1473

<211> 526

<212> PRT

<213> Homo sapiens

<400> 1473

Val Ala Leu Gly Ala Ala Met Ser Ala Gly Glu Val Glu Arg Leu Val 1 5 10 15

Ser Glu Leu Ser Gly Gly Thr Gly Gly Asp Glu Glu Glu Glu Trp Leu 20 25 30

Tyr Gly Asp Glu Asn Glu Val Glu Arg Pro Glu Glu Glu Asn Ala Ser 35 40 45

Ala Asn Pro Pro Ser Gly Ile Glu Asp Glu Thr Ala Glu Asn Gly Val $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$

Pro Lys Pro Lys Val Thr Glu Thr Glu Asp Asp Ser Asp Ser Asp Ser 65 70 75 80

Asp Asp Glu Asp Asp Val His Val Thr Ile Gly Asp Ile Lys Thr 85 90 95

Gly Ala Pro Gln Tyr Gly Ser Tyr Gly Thr Ala Pro Val Asn Leu Asn 100 105 110

Ile Lys Thr Gly Gly Arg Val Tyr Gly Thr Thr Gly Thr Lys Val Lys
115 120 125

Gly Val Asp Leu Asp Ala Pro Gly Ser Ile Asn Gly Val Pro Leu Leu 130 135 140

Glu Val Asp Leu Asp Ser Phe Glu Asp Lys Pro Trp Arg Lys Pro Gly
145 150 155 160

Ala Asp Leu Ser Asp Tyr Phe Asn Tyr Gly Phe Asn Glu Asp Thr Trp 165 170 175

Lys Ala Tyr Cys Glu Lys Gln Lys Arg Ile Arg Met Gly Leu Glu Val 180 185 190

Ile Pro Val Thr Ser Thr Thr Asn Lys Ile Thr Val Gln Gln Gly Arg
195 200 205

Thr	Gly 210	Asn	Ser	Glu	Lys	Glu 215	Thr	Ala	Leu	Pro	Ser 220	Thr	Lys	Ala	Glu
Phe 225	Thr	Ser	Pro	Pro	Ser 230	Leu	Phe	Lys	Thr	Gly 235	Leu	Pro	Pro	Ser	Arg 240
Arg	Leu	Pro	Gly	Ala 245	Ile	Asp	Val	Ile	Gly 250	Gln	Thr	Ile	Thr	Ile 255	Ser
Arg	Val	Glu	Gly 260	Arg	Arg	Arg	Ala	Asn 265	Glu	Asn	Ser	Asn	Ile 270	Gln	Val
Leu	Ser	Glu 275	Arg	Ser	Ala	Thr	Glu 280	Val	Asp	Asn	Asn	Phe 285	Ser	Lys	Pro
Pro	Pro 290	Phe	Phe	Pro	Pro	Gly 295	Ala	Pro	Pro	Thr	His 300	Leu	Pro	Pro	Pro
Pro 305	Phe	Leu	Pro	Pro	Pro 310	Pro	Thr	Val	Ser	Thr 315	Ala	Pro	Pro	Leu	11e 320
Pro	Pro	Pro	Gly	Phe 325	Pro	Pro	Pro	Pro	Gly 330	Ala	Pro	Pro	Pro	Ser 335	Leu
Ile	Pro	Thr	11e 340	Glu	Ser	Gly	His	Ser 345	Ser	Gly	туr	Asp	Ser 350	Arg	Ser
Ala	Arg	Ala 355	Phe	Pro	Tyr	Gly	Asn 360	Val	Ala	Phe	Pro	His 365	Leu	Pro	Gly
Ser	Ala 370	Pro	Ser	Trp	Pro	Ser 375	Leu	Val	Asp	Thr	Ser 380	Lys	Gln	Trp	Asp
Tyr 385	Tyr	Ala	Arg	Arg	Glu 390	Lys	Asp	Arg	Asp	Arg 395	Glu	Arg	Asp	Arg	Asp 400
Arg	Glu	Arg	Asp	Arg 405	Asp	Arg	Asp	Arg	Glu 410	Arg	Glu	Arg	Thr	Arg 415	Glu
Arg	Glu	Arg	Glu 420	Arg	Asp	His	Ser	Pro 425	Thr	Pro	Ser	Val	Phe 430	Asn	Ser
Asp	Glu	Glu 435	Arg	Tyr	Arg	Tyr	Arg 440	Glu	Tyr	Ala	Glu	Arg 445	Gly	Tyr	Glu
Arg	His 450	Arg	Ala	Ser	Arg	Glu 455	Lys	Glu	Glu	Arg	His 460	Arg	Glu	Arg	Arg
His 465	Arg	Glu	Lys	Glu	Glu 470	Thr	Arg	His	Lys	Ser 475	Ser	Arg	Ser	Asn	Ser 480

Arg Arg His Glu Ser Glu Glu Gly Asp Ser His Arg Arg His Lys
485
490
495

His Lys Lys Ser Lys Arg Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu 500 505 510

Pro Ala Pro Glu Gln Glu Ser Thr Glu Ala Thr Pro Ala Glu 515 520 525

<210> 1474

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1474

Ile Met Val Arg Pro Gly Xaa Thr Leu Arg Leu Asp Lys Lys Met Leu 1 5 10 15

Leu Lys Arg Ser Ser Phe Lys Arg Ser Cys Ser Cys Val Lys Leu
20 25 30

Gln Val Trp Phe Val Leu Val Cys Asp His Glu Cys Thr Met Lys Lys 35 40 45

Thr Leu Asp Ala Ala Phe Phe Ser Ser Glu Asp Ser Leu Gly Ile Pro 50 60

Glu Asp Ser Ser Leu Arg 65 70

<210> 1475

<211> 345

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (129) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (159) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids Lys Lys Val Val Ser Tyr Phe Phe Arg Trp Gln Ser Leu Leu Ile Met Ile Met Met Phe Lys Ile Pro Pro Ser Asp Gly Leu Leu Ile Leu Pro 25 Cys Tyr Gly Ser Met Thr Thr Asp Gln Gln Arg Xaa Ile Phe Leu Pro 35 40 45 Pro Pro Pro Gly Ile Xaa Lys Cys Val Ile Ser Thr Asn Ile Ser Ala Thr Ser Leu Thr Ile Asp Gly Ile Arg Tyr Val Val Asp Gly Phe 70 75 Val Lys Gln Leu Asn His Asn Pro Arg Leu Gly Leu Asp Ile Leu Glu 85 Val Val Pro Ile Ser Lys Ser Glu Ala Leu Gln Arg Ser Gly Arg Ala 105 Gly Arg Thr Ser Ser Gly Lys Cys Phe Arg Ile Tyr Ser Lys Asp Phe 120 Xaa Asn Gln Cys Met Pro Asp His Val Ile Pro Glu Ile Lys Arg Thr 130 135 140 Ser Leu Thr Ser Val Val Leu Thr Leu Lys Cys Leu Ala Ile Xaa Asp 145 150 155 Val Ile Arg Phe Pro Xaa Leu Asp Pro Pro Asn Glu Arg Leu Ile Leu

165 175 170 Glu Ala Leu Lys Gln Leu Tyr Gln Cys Asp Ala Ile Asp Arg Ser Gly 180 185 His Val Thr Arg Leu Gly Leu Ser Met Val Glu Phe Pro Leu Pro Pro 200 His Leu Thr Cys Ala Val Ile Lys Ala Ala Ser Leu Asp Cys Glu Asp 210 215 Leu Leu Leu Pro Ile Ala Ala Met Leu Ser Val Glu Asn Val Phe Ile 230 235 Arg Pro Val Asp Pro Glu Tyr Gln Lys Glu Ala Glu Gln Arg His Arg 250 Glu Leu Ala Ala Lys Ala Gly Gly Phe Asn Asp Phe Ala Thr Leu Ala 260 265 Val Ile Phe Glu Gln Cys Lys Ser Ser Gly Ala Pro Ala Ser Trp Cys 280 Gln Lys His Trp Ile His Trp Arg Cys Leu Phe Ser Ala Phe Arg Val 300 Glu Ala Gln Leu Arg Glu Leu Ile Arg Lys Leu Lys Gln Gln Ser Asp 305 310 Ser Gln Lys Arg Pro Leu Lys Ala Leu Asn Met Lys Tyr Tyr Glu Asp 330 325 Val Phe Val Arg Ala Ile Ser Lys Met 340 <210> 1476 <211> 195 <212> PRT <213> Homo sapiens

<400> 1476

Tyr Leu Leu Phe Val Lys Asn Met Ser Ser Leu Glu Ile Ser Ser Ser 1 5 10 15

Cys Phe Ser Leu Glu Thr Lys Leu Pro Leu Ser Pro Pro Leu Val Glu 20 25 30

Asp Ser Ala Phe Glu Pro Ser Arg Lys Asp Met Asp Glu Val Glu Glu 35 40 45

Lys Ser Lys Asp Val Ile Asn Phe Thr Ala Glu Lys Leu Ser Val Asp
50 55 60

Glu Val Ser Gln Leu Val Ile Ser Pro Leu Cys Gly Ala Ile Ser Leu 65 70 75 80

Phe Val Gly Thr Thr Arg Asn Asn Phe Glu Gly Lys Lys Val Ile Ser 85 90 95

Leu Glu Tyr Glu Ala Tyr Leu Pro Met Ala Glu Asn Glu Val Arg Lys 100 105 110

Ile Cys Ser Asp Ile Arg Gln Lys Trp Pro Val Lys His Ile Ala Val

Phe His Arg Leu Gly Leu Val Pro Val Ser Glu Ala Ser Ile Ile Ile 130 135 140

Ala Ile Asp Thr Leu Lys Ala Lys Val Pro Ile Trp Lys Lys Glu Ile 165 170 175

Tyr Glu Glu Ser Ser Thr Trp Lys Gly Asn Lys Glu Cys Phe Trp Ala 180 185 190

Ser Asn Ser 195

<210> 1477

<211> 387

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (370)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (374)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (378) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (379) <223> Xaa equals any of the naturally occurring L-amino acids Asp Ser Glu Asp Asn Pro Gln Thr Leu Leu Phe Ser Ala Thr Cys Pro 10 Gln Trp Val Tyr Lys Val Ala Lys Lys Tyr Met Lys Ser Arg Tyr Glu 25 Gln Val Xaa Leu Val Gly Lys Met Thr Gln Lys Ala Ala Thr Thr Val 35 40 Glu His Leu Ala Ile Gln Cys His Trp Ser Gln Arg Pro Ala Val Ile 55 Gly Asp Val Leu Gln Val Tyr Ser Gly Ser Glu Gly Arg Ala Ile Ile 70 75 Phe Cys Glu Thr Lys Lys Asn Val Thr Glu Met Ala Met Asn Pro His 85 Ile Lys Gln Asn Ala Gln Cys Leu His Gly Asp Ile Ala Gln Ser Gln Arg Glu Ile Thr Leu Lys Gly Phe Arg Glu Gly Ser Phe Lys Val Leu 120 Val Ala Thr Asn Val Ala Ala Arg Gly Leu Asp Ile Pro Glu Val Asp 130 140 135 Leu Val Ile Gln Ser Ser Pro Pro Gln Asp Val Glu Ser Tyr Ile His 145 150 Arg Ser Gly Arg Thr Gly Arg Ala Gly Arg Thr Gly Ile Cys Ile Cys 170 165 Phe Tyr Gln Pro Arg Glu Arg Gly Gln Leu Arg Tyr Val Glu Gln Lys 185 180 Ala Gly Ile Thr Phe Lys Arg Val Gly Val Pro Ser Thr Met Asp Leu

200

195

205

210 215 220 Tyr Ala Ala Val Asp Phe Phe Arg Pro Ser Ala Gln Arg Leu Ile Glu 230 Glu Lys Gly Ala Val Asp Ala Leu Ala Ala Leu Ala His Ile Ser 250 Gly Ala Ser Ser Phe Glu Pro Arg Ser Leu Ile Thr Ser Asp Lys Gly 260 265 270 Phe Val Thr Met Thr Leu Glu Ser Leu Glu Glu Ile Gln Asp Val Ser 280 Cys Ala Trp Lys Glu Leu Asn Arg Lys Leu Ser Ser Asn Ala Val Ser Gln Ile Thr Arg Met Cys Leu Leu Lys Gly Asn Met Gly Val Cys Phe 305 310 315 320 Asp Val Pro Thr Thr Glu Ser Glu Arg Leu Gln Ala Glu Trp His Asp 325 330 Ser Asp Trp Ile Leu Ser Val Pro Ala Lys Leu Pro Glu Ile Glu Glu 345

Val Lys Ser Lys Ser Met Asp Ala Ile Arg Ser Leu Ala Ser Val Ser

Ser Xaa Gly Arg Ser Xaa Arg Ser Ala Xaa Xaa Gly Gly Arg Ser Gly 370 380

Tyr Tyr Asp Gly Asn Thr Ser Ser Asn Ser Arg Gln Arg Ser Gly Trp

Gly Gly Gln 385

355

<210> 1478

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1478

Thr Gly Ala Cys His His Ala Gln Leu Asn Phe Val Phe Leu Val Glu
1 5 10 15

Thr Gly Phe His His Val Gly Gln Asp Gly Leu Asn Leu Leu Thr Leu 20 25 30

Arg Ser Ala His Leu Ser Leu Pro Lys Cys Trp Asp Tyr Arg Arg Asn
35 40 45

Thr Arg Ala Trp Pro Val Leu
50 55

<210> 1479

<211> 559

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (555)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1479

Ala Arg Ala Asp Gly Arg Asp Gly Arg Gly Gly Arg Arg Ala Pro Trp

1 5 10 15

Arg Ala Leu Thr Ser Ala Ser Pro Arg Ala Ala Leu Pro Gln Ala Gln
20 25 30

Cys Pro Glu Leu Gly Ala Ser Pro Ala Arg Gly Thr Leu Leu Ala Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Glu Val Val Ser Pro Val Leu Ser Ser Arg Pro Gly Gly Pro Lys Leu 50 55 60

Pro Asp Asp Glu Glu Pro Pro Asn Met Ala Ser Glu Ser Gly Lys Leu 65 70 75 80

Trp Gly Gly Arg Phe Val Gly Ala Val Asp Pro Ile Met Glu Lys Phe
85 90 95

Asn Ala Ser Ile Ala Tyr Asp Arg His Leu Trp Glu Val Asp Val Gln
100 105 110

Gly Ser Lys Ala Tyr Ser Arg Gly Leu Glu Lys Ala Gly Leu Leu Thr 115 120 125

Lys Ala Glu Met Asp Gln Ile Leu His Gly Leu Asp Lys Val Ala Glu 130 135 140

Glu Trp Ala Gln Gly Thr Phe Lys Leu Asn Ser Asn Asp Glu Asp Ile 145 150 155 160

His Thr Ala Asn Glu Arg Arg Leu Lys Glu Leu Ile Gly Ala Thr Ala 165 170 175

Gly	Lys	Leu	His 180	Thr	Gly	Arg	Ser	Arg 185	Asn	Asp	Gln	Val	Val 190	Thr	Asp
Leu	Arg	Leu 195	Trp	Met	Arg	Gln	Thr 200	Cys	Ser	Thr	Leu	Ser 205	Gly	Leu	Leu
Trp	Glu 210	Leu	Ile	Arg	Thr	Met 215	Val	Asp	Arg	Ala	Glu 220	Ala	Glu	Arg	Asp
Val 225	Leu	Phe	Pro	Gly	Туг 230	Thr	His	Leu	Gln	Arg 235	Ala	Gln	Pro	Ile	Arg 240
Trp	Ser	His	Trp	Ile 245	Leu	Ser	His	Ala	Val 250	Ala	Leu	Thr	Arg	Asp 255	Ser
Glu	Arg	Leu	Leu 260	Glu	Val	Arg	Lys	Arg 265	Ile	Asn	Val	Leu	Pro 270	Leu	Gly
Ser	Gly	Ala 275	Ile	Ala	Gly	Asn	Pro 280	Leu	Gly	Val	Asp	Arg 285	Glu	Leu	Leu
Arg	Ala 290	Glu	Leu	Asn	Phe	Gly 295	Ala	Ile	Thr	Leu	Asn 300	Ser	Met	Asp	Ala
Thr 305	Ser	Glu	Arg	Asp	Phe 310	Val	Ala	Glu	Phe	Leu 315	Phe	Trp	Ala	Ser	Leu 320
Cys	Met	Thr	His	Leu 325	Ser	Arg	Met	Ala	Glu 330	Asp	Leu	Ile	Leu	Tyr 335	Cys
Thr	Lys	Glu	Phe 340	Ser	Phe	Val	Gln	Leu 345	Ser	Asp	Ala	Tyr	Ser 350	Thr	Gly
Ser	Ser	Leu 355	Met	Pro	Gln	Lys	Lys 360	Asn	Pro	Asp	Ser	Leu 365	Glu	Leu	Ile
Arg	Ser 370	Lys	Ala	Gly	Arg	Val 375	Phe	Gly	Arg	Cys	Ala 380	Gly	Leu	Leu	Met
Thr 385	Leu	Lys	Gly	Leu	Pro 390	Ser	Thr	Tyr	Asn	Lys 395	Asp	Leu	Gln	Glu	Asp 400
Lys	Glu	Ala	Val	Phe 405	Glu	Val	Ser	Asp	Thr 410	Met	Ser	Ala	Val	Leu 415	Gln
Val	Ala	Thr	Gly 420	Val	Ile	Ser	Thr	Leu 425	Gln	Ile	His	Gln	Glu 430	Asn	Met
Gly	Gln	Ala 435	Leu	Ser	Pro	Asp	Met 440	Leu	Ala	Thr	Asp	Leu 445	Ala	Tyr	Tyr

Leu Val Arg Lys Gly Met Pro Phe Arg Gln Ala His Glu Ala Ser Gly
450 455 460

Lys Ala Val Phe Met Ala Glu Thr Lys Gly Val Ala Leu Asn Gln Leu 465 470 475 480

Ser Leu Gln Glu Leu Gln Thr Ile Ser Pro Leu Phe Ser Gly Asp Val
485 490 495

Ile Cys Val Trp Asp Tyr Gly His Ser Val Glu Gln Tyr Gly Ala Leu 500 505 510

Gly Ala Leu Arg Ala Pro Ala Ser Thr Gly Arg Ser Ala Arg Cys Gly 515 520 525

Arg Tyr Cys Arg His Ser Arg Pro Arg Ser Ser His Thr Cys Pro Leu 530 540

Ile Lys Trp Ala Arg Glu Glu Lys Lys Lys Xaa Lys Lys Lys Phe 545 550 555

<210> 1480

<211> 200

<212> PRT

<213> Homo sapiens

<400> 1480

Ser Leu Gly Glu Leu Pro Thr Asp Pro Ser Ser Asp Glu Pro Val Phe
1 5 10 15

His Ile Ser His Ile Asp Arg Val Tyr Thr Leu Arg Thr Asp Asn Ile 20 25 30

As Glu Arg Thr Thr Trp Val Gln Lys Ile Lys Ala Ala Ser Glu Gln 35 40 45

Tyr Ile Asp Thr Glu Lys Lys Lys Arg Glu Lys Ala Tyr Gln Ala Arg 50 55 60

Ser Gln Lys Thr Ser Gly Ile Gly Arg Leu Met Val His Val Ile Glu 65 70 75 80

Ala Thr Glu Leu Lys Ala Cys Lys Pro Asn Gly Lys Ser Asn Pro Tyr 85 90 95

Cys Glu Ile Ser Met Gly Ser Gln Ser Tyr Thr Thr Arg Thr Ile Gln
100 105 110

Asp Thr Leu Asn Pro Lys Trp Asn Phe Asn Cys Gln Phe Phe Ile Lys 120 Asp Leu Tyr Gln Asp Val Leu Cys Leu Thr Leu Phe Asp Arg Asp Gln 135 Phe Ser Pro Asp Asp Phe Leu Gly Arg Thr Glu Ile Pro Val Ala Lys 145 155 Ile Arg Thr Glu Gln Glu Ser Lys Gly Pro Met Thr Arg Arg Leu Leu 170 Leu His Glu Val Pro Thr Gly Glu Val Trp Val Arg Phe Asp Leu Gln 185 Leu Phe Glu Gln Lys Thr Leu Leu 195 <210> 1481 <211> 109 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids Gln Leu Leu Leu Pro Pro Lys Ala Pro Arg Asn Pro Phe Leu Pro 10 Cys Pro Gly Ser Arg Thr Pro Gly Tyr Ile Trp Lys Val Glu Met Trp 25 Gly Ser Cys Xaa Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala Val Phe 35 Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys Ala Val Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys Leu Ser 70 75 Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His Trp Arg

Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala

100

105

<210> 1482 <211> 205 <212> PRT <213> Homo sapiens <400> 1482 Asp Pro Arg Val Arg Ala Ala Arg Thr Ala Phe Gly Ala Val Cys Arg Arg Leu Trp Gln Gly Leu Gly Asn Phe Ser Val Asn Thr Ser Lys Gly Asn Thr Ala Lys Asn Gly Gly Leu Leu Ser Thr Asn Met Lys Trp Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp Leu Thr Lys Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr Lys Arg Leu 70 75 Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp Ser Tyr Glu 85 90 Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser Ile Lys Val His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu Gln Ser Val 120 His Ile Tyr Lys Lys His Arg Val Gln Tyr Glu Met Arg Thr Leu Tyr 130 135 Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala Asp Val Tyr 150 155 Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala Met Glu Val 165 170 Thr Lys Thr Gln Leu Glu Gln Leu Pro Glu His Ile Lys Glu Pro Ile 180 185

Trp Glu Thr Leu Ser Glu Glu Lys Glu Glu Ser Lys Ser

200

195

<211> 370

<212> PRT

<213> Homo sapiens

<400> 1483

Gly Gln Ile Lys Asp Glu Thr Leu Gln Ala Ala Val Arg Glu Ile Leu l 5 10 15

Ala Leu Ile Gly Tyr Val Asp Pro Val Lys Gly Arg Gly Ile Arg Ile
20 25 30

Leu Ser Ile Asp Gly Gly Gly Thr Arg Gly Val Val Ala Leu Gln Thr 35 40 45

Leu Arg Lys Leu Val Glu Leu Thr Gln Lys Pro Val His Gln Leu Phe 50 . 55 60

Asp Tyr Ile Cys Gly Val Ser Thr Gly Ala Ile Leu Ala Phe Met Leu 65 70 75 80

Gly Leu Phe His Met Pro Leu Asp Glu Cys Glu Glu Leu Tyr Arg Lys 85 90 95

Leu Gly Ser Asp Val Phe Ser Gln Asn Val Ile Val Gly Thr Val Lys
100 105 110

Met Ser Trp Ser His Ala Phe Tyr Asp Ser Gln Thr Trp Glu Asn Ile 115 120 125

Leu Lys Asp Arg Met Gly Ser Ala Leu Met Ile Glu Thr Ala Arg Asn 130 135 140

Pro Thr Cys Pro Lys Val Ala Ala Val Ser Thr Ile Val Asn Arg Gly 145 150 155 160

Ile Thr Pro Lys Ala Phe Val Phe Arg Asn Tyr Gly His Phe Pro Gly 165 170 175

Ile Asn Ser His Tyr Leu Gly Gly Cys Gln Tyr Lys Met Trp Gln Ala 180 185 190

Ile Arg Ala Ser Ser Ala Ala Pro Gly Tyr Phe Ala Glu Tyr Ala Leu 195 200 205

Gly Asn Asp Leu His Gln Asp Gly Gly Leu Leu Leu Asn Asn Pro Ser 210 215 220

Ala Leu Ala Met His Glu Cys Lys Cys Leu Trp Pro Asp Val Pro Leu 225 230 235 240

Glu Cys Ile Val Ser Leu Gly Thr Gly Arg Tyr Glu Ser Asp Val Arg

245 250 255

Asn Thr Val Thr Tyr Thr Ser Leu Lys Thr Lys Leu Ser Asn Val Ile 260 265 270

Asn Ser Ala Thr Asp Thr Glu Glu Val His Ile Met Leu Asp Gly Leu 275 280 285

Leu Pro Pro Asp Thr Tyr Phe Arg Phe Asn Pro Val Met Cys Glu Asn 290 295 300

Ile Pro Leu Asp Glu Ser Arg Asn Glu Lys Leu Asp Gln Leu Gln Leu 305 310 315 320

Glu Gly Leu Lys Tyr Ile Glu Arg Asn Glu Gln Lys Met Lys Lys Val 325 330 335

Ala Lys Ile Leu Ser Gln Glu Lys Thr Thr Leu Gln Lys Ile Asn Asp 340 345 350

Trp Ile Lys Leu Lys Thr Asp Met Tyr Glu Gly Leu Pro Phe Phe Ser 355 360 365

Lys Leu 370

<210> 1484

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1484

Asp Ser Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Asn Ser 1 5 10 15

Val Leu Thr Ile Asn Ala Thr Met Pro Glu Pro Thr Lys Ser Ala Pro 20 25 30

Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala Gln Lys Lys 35 40 45

Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr Ser Val Tyr 50 55 60

Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly Ile Ser Ser 65 70 75 80

Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile Phe Glu Arg 85 90 95

Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys Arg Ser Thr 100 105 110

Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu Pro Gly
115 120 125

Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala Val Thr Lys 130 135 140

Tyr Thr Ser Ser Lys 145

<210> 1485

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1485

Asp Pro Arg Val Arg Thr Phe Pro Pro Thr Leu Leu Leu Leu His

1 5 10 15

Ser Arg Leu Ser Leu Cys Leu Ser His Phe Leu Pro Ser Pro His Pro 20 25 30

Pro Gln Cys Thr Glu Glu Gly Asn Arg Val Gln Thr His Ala Ala Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Val Leu Arg Arg Glu Gly Lys Pro Arg Arg Glu Ala Ala Met Asn Val 50 55 60

Asp His Glu Val Asn Leu Leu Val Glu Glu Ile His Arg Leu Gly Ser 65 70 75 80

Lys Asn Ala Asp Gly Lys Leu Ser Val Lys Phe Gly Val Leu Phe Arg 85 90 95

Asp Asp Lys Cys Ala Asn Leu Phe Glu Ala Leu Val Gly Thr Leu Lys
100 105 110

Ala Ala Lys Arg Arg Lys Ile Val Thr Tyr Pro Gly Glu Leu Leu Leu 115 120 125

Gln Gly Val His Asp Asp Val Asp Ile Ile Leu Leu Gln Asp 130 135 140

..

```
<211> 298
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1486
Arg Gly Lys Cys Pro Ser Thr Ser Ser Leu Met Lys Glu Thr Ala Ala
Pro Ser Gln Ile Met Lys Asn Phe Gln Ala Pro Pro Gln Ile Ser Leu
            20
                                 25
Thr Ile Thr Leu Leu Gly Glu Thr Thr Met Met Gln Pro Gln Pro
         35
                             40
Thr Gln Gln Xaa Thr Pro Gly Pro Ser Ser Gly Gly His Ala Ser Gln
                        55
                                             60
Ser Gly Asp Asn Ser Ser Glu Gln Gly Asp Gly Leu Asp Asn Ser Val
65
                     70
                                        75
Ala Ser Pro Gly Thr Val Thr Asp Asp Pro Asp Lys Asp Lys
                 85
                                     90
Arg Gln Lys Lys Arg Gly Ile Phe Pro Lys Val Ala Thr Asn Ile Met
                               105
Arg Ala Trp Leu Phe Gln His Leu Thr His Pro Tyr Pro Ser Glu Glu
       115
                           120
                                                125
Gln Lys Lys Gln Leu Ala Gln Asp Thr Gly Leu Thr Ile Leu Gln Val
```

135

140

130

Asn Asn Trp Phe Ile Asn Ala Arg Arg Ile Val Gln Pro Met Ile
145 150 155 160

Asp Gln Ser Asn Arg Ala Gly Phe Leu Leu Asp Pro Ser Val Ser Gln 165 170 175

Gly Ala Ala Tyr Ser Pro Xaa Gly Gln Pro Met Gly Ser Phe Val Leu 180 185 190

Asp Gly Xaa Gln His Met Gly Ile Arg Pro Ala Gly Leu Gln Ser Met 195 200 205

Pro Gly Asp Tyr Val Ser Gln Gly Gly Pro Met Gly Met Ser Xaa Ala 210 215 220

Gln Pro Ser Tyr Thr Pro Pro Gln Met Thr Pro His Pro Thr Gln Leu 225 230 235 240

Arg His Gly Pro Pro Met His Ser Tyr Leu Pro Ser His Pro His His 245 250 255

Pro Ala Met Met His Gly Gly Pro Pro Thr His Pro Gly Met Thr 260 265 270

Met Ser Ala Gln Ser Pro Thr Met Leu Asn Ser Val Asp Pro Asn Val 275 280 285

Gly Gly Gln Val Met Asp Ile His Ala Gln 290 295

<210> 1487

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1487

His Gln Ala Ile Lys Pro Gly Tyr Ser Ala Glu Asn Val Ala His Thr
1 5 10 15

Asp His Thr Leu Gly Cys Val Thr Ile Val Trp Cys Thr Cys Trp Lys
20 25 30

Asn Ser Ser Met Leu Leu Gly Asp Ile Ile Ser Val Gly Asn Met Pro 35 40 45

Leu Thr Asp Phe Phe Phe Phe Leu Phe Ala Val Gly Leu Gly Gln Leu 50 55 60

Ile Gln Gln Ser Ile Phe Phe Phe Phe Leu Ser Pro Asn Leu Asn Arg
65 70 75 80

Ser Lys Met Cys Ser Gly Ile Pro Gly Asn Arg Cys Val Cys Lys Val 85 90 95

Lys Asn Arg Leu Phe Arg Asn Ser Leu Phe Arg Tyr Leu His Pro Ala 100 105 110

Ser His Val Lys Tyr Leu Ser Leu Lys Gly Leu Arg Cys Thr Ser Phe 115 120 125

Ile Ser Tyr Phe Ser 130

<210> 1488

<211> 42

<212> PRT

<213> Homo sapiens

<400> 1488

Gln Arg Cys Pro Arg Cys Gly His Glu Gly Met Ala Tyr His Thr Arg 1 5 10 15

Gln Met Arg Ser Ala Asp Glu Gly Gln Thr Val Phe Tyr Thr Cys Thr 20 25 30

Asn Cys Lys Phe Gln Glu Lys Glu Asp Ser 35 40

<210> 1489

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1489

His Glu Ala Ala Phe Val Leu Cys Leu Thr Met Pro Glu Pro Ala Lys $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala 20 25 30

...

Gln Lys Lys Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr 35 40 45

Ser Ile Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly 50 55 60

Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile
65 70 75 80

Phe Glu Arg Ile Xaa Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys 85 90 95

Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu 100 105 110

Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala 115 120 125

Val Thr Lys Tyr Thr Ser Ser Lys 130 135

<210> 1490

<211> 235

<212> PRT

<213> Homo sapiens

<400> 1490

Pro Leu Ser Pro Gly Ala Gln Leu Gly Arg Gly Ala Pro Thr Ser Ala 1 5 10 15

Phe Pro Pro Pro Ala Ala Glu Ala His Pro Ala Ala Arg Arg Gly Leu 20 25 30

Arg Ser Pro Gln Leu Pro Ser Gly Ala Met Ser Gln Asn Gly Ala Pro 35 40 45

Gly Met Gln Glu Glu Ser Leu Gln Gly Ser Trp Val Glu Leu His Phe 50 55 60

Ser Asn Asn Gly Asn Gly Gly Ser Val Pro Ala Ser Val Ser Ile Tyr 65 70 75 80

Asn Gly Asp Met Glu Lys Ile Leu Leu Asp Ala Gln His Glu Ser Gly 85 90 95

Arg Ser Ser Lys Ser Ser His Cys Asp Ser Pro Pro Arg Ser Gln
100 105 110

Thr Pro Gln Asp Thr Asn Arg Ala Ser Glu Thr Asp Thr His Ser Ile

115 120 125

Gly Glu Lys Asn Ser Ser Gln Ser Glu Glu Asp Asp Ile Glu Arg Arg 130 135 140

Lys Glu Val Glu Ser Ile Leu Lys Lys Asn Ser Asp Trp Ile Trp Asp 145 150 155 160

Trp Ser Ser Arg Pro Glu Asn Ile Pro Pro Lys Glu Phe Leu Phe Lys
165 170 175

His Pro Lys Arg Thr Ala Thr Leu Ser Met Arg Asn Thr Ser Val Met 180 185 190

Lys Lys Gly Gly Ile Phe Ser Ala Glu Phe Leu Lys Val Phe Leu Pro 195 200 205

Ser Leu Leu Ser His Leu Leu Ala Ile Gly Leu Gly Ile Tyr Ile 210 $\,$ 215 $\,$ 220 $\,$

Gly Arg Arg Leu Thr Thr Ser Thr Ser Thr Phe 225 230 235

<210> 1491

<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1491

Lys Pro Glu Lys Lys Gly Val His Leu Asn Ser Asp Leu Pro Gln Met

1 10 15

Gln His Leu Trp Ile Pro Leu Cys Ala Pro Asn Ser Leu Ser Gln Leu 20 25 30

Pro Ile Thr Asp Thr Ile Arg Lys Asp Ser Lys Glu Lys Lys Lys Arg 35 40 45

Lys Ala Ser Lys Leu Thr Leu Trp Gly Thr Tyr His Gly Met Thr Leu 50 55 60

Xaa Ser Val Thr Glu Gly Ala Ser Ala Arg Lys Thr Gln Thr Pro Ala 65 70 75 80

Ala Gln Pro Val Pro Arg Pro Val Ser Gln Ala Arg Pro Pro Pro Asn Gln Lys Lys Gly Ser Arg Thr Pro Ile Ile Ile Pro Ala Ala Thr 100 105 Thr Ser Leu Ile Thr Met Leu Asn Ala Lys Asp Leu Leu Gln Asp Leu 115 120 Lys Phe Val Pro Ser Asp Glu Lys Lys Gln Gly Cys Gln Arg Glu 135 Asn Glu Thr Leu Ile Gln Arg Arg Lys Asp Gln Met Gln Pro Gly Gly 150 155 Thr Ala Ile Ser Val Thr Val Pro Tyr Arg Val Val Asp Gln Pro Leu 165 170 Lys Leu Met Pro Gln Asp Trp Asp Arg Val Val Ala Val Phe Val Gln 185 Gly Pro Ala Trp Gln Phe Lys Gly Trp Pro Trp Leu Leu Pro Asp Gly 200 Ser Pro Val Asp Ile Phe Ala Lys Ile Lys Ala Phe His Leu Lys Tyr 210 215 Asp Glu Val Arg Leu Asp Pro Asn Val Gln Lys Trp Asp Val Thr Val 230 235 Leu Glu Leu Ser Tyr His Lys Arg His Leu Asp Arg Pro Val Phe Leu 245 250 Arg Phe Trp Glu Thr Leu Asp Arg Tyr Met Val Lys His Lys Ser His 265 Leu Arg Phe 275

<210> 1492 <211> 380

1211/ 500

<212> PRT

<213> Homo sapiens

<400> 1492

Gly Leu Arg Leu Gly Ser Trp Ser Gly Glu Glu Lys Gly Ile Pro Thr
1 5 10 . 15

Cys Gly Thr Leu Gly Gly Pro Arg Gly Arg Arg Leu Pro Ile Asp Cys

20 30 25 Gly Arg Cys Lys Gly Arg Ser Leu Trp Arg Leu Val Gly Val Leu Gly Ser Ala Gly Gly Arg Gly Val Ser Glu Cys Glu Arg Gly Thr Gly 55 Ile Pro Asn Leu Arg Ala Ser Arg Leu Trp Arg Arg Gly Gly Arg Ala Gln Ala Ala Met Arg Asp Arg Thr His Glu Leu Arg Gln Gly Asp Asp Ser Ser Asp Glu Glu Asp Lys Glu Arg Val Ala Leu Val Val His Pro 105 Gly Thr Ala Arg Leu Gly Ser Pro Asp Glu Glu Phe Phe His Lys Val 115 120 Arg Thr Ile Arg Gln Thr Ile Val Lys Leu Gly Asn Lys Val Gln Glu 135 Leu Glu Lys Gln Gln Val Thr Ile Leu Ala Thr Pro Leu Pro Glu Glu 150 155 Ser Met Lys Gln Glu Leu Gln Asn Leu Arg Asp Glu Ile Lys Gln Leu 165 170 Gly Arg Glu Ile Arg Leu Gln Leu Lys Ala Ile Glu Pro Gln Lys Glu 180 185 Glu Ala Asp Glu Asn Tyr Asn Ser Val Asn Thr Arg Met Arg Lys Thr 200 Gln His Gly Val Leu Ser Gln Gln Phe Val Glu Leu Ile Asn Lys Cys 210 215 Asn Ser Met Gln Ser Glu Tyr Arg Glu Lys Asn Val Glu Arg Ile Arg 230 235 Arg Gln Leu Lys Ile Thr Asn Ala Gly Met Val Ser Asp Glu Glu Leu 245 250 Glu Gln Met Leu Asp Ser Gly Gln Ser Glu Val Phe Val Ser Asn Ile 260

Leu Lys Asp Thr Gln Val Thr Arg Gln Ala Leu Asn Glu Ile Ser Ala 275 280 285

Arg His Ser Glu Ile Gln Gln Leu Glu Arg Ser Ile Arg Glu Leu His

290 295 300 Asp Ile Phe Thr Phe Leu Ala Thr Glu Val Glu Met Gln Gly Glu Met 310 Ile Asn Arg Ile Glu Lys Asn Ile Leu Ser Ser Ala Asp Tyr Val Glu 325 330 Arg Gly Gln Glu His Val Lys Thr Ala Leu Glu Asn Gln Lys Lys Ala 340 345 Arg Lys Lys Val Leu Ile Ala Ile Cys Val Ser Ile Thr Val Val Leu Leu Ala Val Ile Ile Gly Val Thr Val Val Gly 375 <210> 1493 <211> 88 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1493 Ala Gln Lys Glu Leu Thr Lys Ala His Xaa Leu Glu Val Arg Leu His 10 Thr Phe Ser Met Phe Gly Met Pro Arg Leu Pro Pro Xaa Asp Arg Arg 25 His Trp Glu Ile Gly Glu Gly Gly Asp Ser Gly Leu Thr Ile Glu Lys 35 40

Ser Trp Arg Glu Leu Val Pro Gly His Lys Glu Met Ser Gln Glu Leu

60

55

50

Cys His Gln Glu Ala Leu Trp Xaa Leu Leu Thr Thr Glu Leu Ile 65 70 75 80

Leu Arg Glu Lys Ala Ser Arg Ser 85

<210> 1494

<211> 469

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1494

Thr Ser Trp Met His Thr Arg Phe Ser Arg Arg Asn Trp Gly Lys Arg

1 10 15

Thr Gly Thr Val Gln Val Leu Lys Arg Ser Gly Arg Glu Leu Ile Glu 20 25 30

As Ser Arg Asp Asp Thr Thr Trp Val Lys Gly Gln Leu Gln Glu Leu 35 40 45

Ser Thr Arg Trp Asp Thr Val Cys Lys Leu Ser Val Ser Lys Gln Ser 50 60

Arg Leu Glu Gln Ala Leu Lys Gln Ala Glu Val Phe Arg Asp Thr Val 65 70 75 80

His Met Leu Leu Glu Trp Leu Ser Glu Ala Glu Gln Thr Leu Arg Phe
85 90 95

Arg Gly Ala Leu Pro Asp Asp Thr Glu Ala Leu Gln Ser Leu Ile Asp 100 105 110

Thr His Lys Glu Phe Met Lys Lys Val Glu Glu Lys Arg Val Asp Val 115 120 125

Asn Ser Ala Val Ala Met Gly Glu Val Ile Leu Ala Val Cys His Pro 130 135 140

Asp Cys Ile Thr Thr Ile Lys His Trp Ile Thr Ile Ile Arg Ala Arg 145 150 155 160

Phe Glu Glu Val Leu Thr Trp Ala Lys Gln His Gln Gln Arg Leu Glu

• •

165 -170 175 Thr Ala Leu Ser Glu Leu Val Ala Asn Ala Glu Leu Leu Glu Glu Leu 180 185 Leu Ala Trp Ile Gln Trp Ala Glu Thr Thr Leu Ile Gln Arg Asp Gln 200 Glu Pro Ile Pro Gln Asn Ile Asp Arg Val Lys Ala Leu Ile Ala Glu 210 220 215 His Gln Thr Phe Met Glu Glu Met Thr Arg Lys Gln Pro Asp Val Asp 230 Arg Val Thr Lys Thr Tyr Lys Arg Lys Asn Ile Glu Pro Thr His Ala 250 Pro Phe Ile Glu Lys Ser Arg Ser Gly Gly Arg Lys Ser Leu Ser Gln 265 Pro Thr Pro Pro Pro Met Pro Ile Leu Ser Gln Ser Glu Ala Lys Asn 280 275 Pro Arg Ile Asn Gln Leu Ser Ala Arg Trp Xaa Gln Val Trp Leu Leu 295 300 Ala Leu Glu Arg Gln Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu 305 310 Glu Leu Lys Glu Phe Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys 330 Tyr Met Arg Trp Met Asn His Lys Lys Ser Arg Val Met Asp Phe Phe 345 Arg Arg Ile Asp Lys Asp Gln Asp Gly Lys Ile Thr Arg Gln Glu Phe 355 360 Ile Asp Gly Ile Leu Ala Ser Lys Phe Pro Thr Thr Lys Leu Glu Met 380 375 Thr Ala Val Ala Asp Ile Phe Asp Arg Asp Gly Asp Gly Tyr Ile Asp 395 Tyr Tyr Glu Phe Val Ala Ala Leu His Pro Asn Lys Asp Ala Tyr Arg 405 410 Pro Thr Thr Asp Ala Asp Lys Ile Glu Asp Glu Val Thr Arg Gln Val 420 425 430 Ala Gln Cys Lys Cys Ala Lys Arg Phe Gln Val Glu Gln Ile Gly Glu

435 440 445

Asn Lys Tyr Arg Val Arg Lys Arg Lys Ser Ser Pro Leu Leu Trp Trp 450 455 460

Phe Leu Ile Cys Gly 465

<210> 1495

<211> 366

<212> PRT

<213> Homo sapiens

<400> 1495

Thr Asn Tyr Ile Ser Arg Gln Ala Ala Glu Gly Gly Arg Val Glu Gly 1 5 10 15

Pro Pro Leu Arg Pro Pro Ala Thr Ser Arg Arg Trp Ala Gly Pro Thr 20 25 30

Leu Trp Arg Met Glu Val Thr Gly Asp Ala Gly Val Pro Glu Ser Gly 35 40 45

Glu Ile Arg Thr Leu Lys Pro Cys Leu Leu Arg Arg Asn Tyr Ser Arg 50 55 60

Glu Gln His Gly Val Ala Ala Ser Cys Leu Glu Asp Leu Arg Ser Lys 65 70 75 80

Ala Cys Asp Ile Leu Ala Ile Asp Lys Ser Leu Thr Pro Val Thr Leu $85 \hspace{1cm} 90 \hspace{1cm} 95$

Val Leu Ala Glu Asp Gly Thr Ile Val Asp Asp Asp Asp Tyr Phe Leu 100 105 110

Cys Leu Pro Ser Asn Thr Lys Phe Val Ala Leu Ala Ser Asn Glu Lys 115 120 125

Trp Ala Tyr Asn Asn Ser Asp Gly Gly Thr Ala Trp Ile Ser Gln Glu 130 135 140

Ser Phe Asp Val Asp Glu Thr Asp Ser Gly Ala Gly Leu Lys Trp Lys 145 150 155 160

Asn Val Ala Arg Gln Leu Lys Glu Asp Leu Ser Ser Ile Ile Leu Leu 165 170 175

Ser Glu Glu Asp Leu Gln Met Leu Val Asp Ala Pro Cys Ser Asp Leu 180 185 190 Ala Gln Glu Leu Arg Gln Ser Cys Ala Thr Val Gln Arg Leu Gln His
195 200 205

Thr Leu Gln Gln Val Leu Asp Gln Arg Glu Glu Val Arg Gln Ser Lys 210 215 220

Gln Leu Leu Gln Leu Tyr Leu Gln Ala Leu Glu Lys Glu Gly Ser Leu 225 230 235 240

Leu Ser Lys Gln Glu Glu Ser Lys Ala Ala Phe Gly Glu Glu Val Asp 245 250 255

Ala Val Asp Thr Gly Ile Ser Arg Glu Thr Ser Ser Asp Val Ala Leu 260 265 270

Ala Ser His Ile Leu Thr Ala Leu Arg Glu Lys Gln Ala Pro Glu Leu 275 280 285

Ser Leu Ser Ser Gln Asp Leu Glu Leu Val Thr Lys Glu Asp Pro Lys 290 295 300

Ala Leu Ala Val Ala Leu Asn Trp Asp Ile Lys Lys Thr Glu Thr Val 305 310 315 320

Gln Glu Ala Cys Glu Arg Glu Leu Ala Leu Arg Leu Gln Gln Thr Gln 325 330 335

Ser Leu His Ser Leu Arg Ser Ile Ser Ala Ser Lys Ala Ser Pro Pro 340 345 350

Gly Asp Leu Gln Asn Pro Lys Arg Ala Arg Gln Asp Pro Thr 355 360 365

<210> 1496

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1496

Phe Pro Phe Glu Leu Val Thr Asn Pro Asp Phe Ser Pro Thr Pro Val 1 5 10 15

Thr Phe Glu Lys Ala Leu Asn Ala Gly Phe Ile Gln Ala Thr Asp Tyr
20 25 30

Val Glu Ile Trp Gln Ala Tyr Leu Asp Tyr Leu Arg Arg Arg Val Asp 35 40 45

Phe	Lys 50	Gln	Asp	Ser	Ser	Lys 55	Glu	Leu	Glu	Glu	Leu 60	Arg	Ala	Ala	Phe
Thr 65	Arg	Ala	Leu	Glu	Tyr 70	Leu	Lys	Gln	Glu	Val 75	Glu	Glu	Arg	Phe	Asn 80
Glu	Ser	Gly	Asp	Pro 85	Ser	Cys	Val	Ile	Met 90	Gln	Asn	Trp	Ala	Arg 95	Ile
Glu	Ala	Arg	Leu 100	Суѕ	Asn	Asn	Met	Gln 105	Lys	Ala	Arg	Glu	Leu 110	Trp	Asp
Ser	Ile	Met 115	Thr	Arg	Gly	Asn	Ala 120	Lys	Tyr	Ala	Asn	Met 125	Trp	Leu	Glu
Tyr	туr 130	Asn	Leu	Glu	Arg	Ala 135	His	Gly	Asp	Thr	Gln 140	His	Суѕ	Arg	Lys
Ala 145	Leu	His	Arg	Ala	Val 150	Gln	Cys	Thr	Ser	Asp 155	Tyr	Pro	Glu	His	Val 160
Cys	Glu	Val	Leu	Leu 165	Thr	Met	Glu	Arg	Thr 170	Glu	Gly	Ser	Leu	Glu 175	Asp
Trp	Asp	Ile	Ala 180	Val	Gln	Lys	Thr	Glu 185	Thr	Arg	Leu	Ala	Arg 190	Val	Asn
Glu	Gln	Arg 195	Met	Lys	Ala	Ala	Glu 200	Lys	Glu	Ala	Ala	Leu 205	Val	Gln	Gln
Glu	Glu 210	Glu	Lys	Ala	Glu	Gln 215	Arg	Lys	Arg	Ala	Arg 220	Ala	Glu	Lys	Lys
Ala 225	Leu	Lys	Lys	Lys	Lys 230	Lys	Ile	Arg	Gly	Pro 235	Glu	Lys	Arg	Gly	Ala 240
Asp	Glu	Asp	Asp	Glu 245	Lys	Glu	Trp	Gly	Asp 250	Asp	Glu	Glu	Glu	Gln 255	Pro
Ser	Lys	Arg	Arg 260	Arg	Val	Glu	Asn	Ser 265	Ile	Pro	Ala	Ala	Gly 270	Glu	Thr
Gln	Asn	Val 275	Glu	Val	Ala	Ala	Gly 280	Pro	Ala	Gly	Lys	Cys 285	Ala	Ala	Val
Asp	Val 290	Glu	Pro	Pro	Ser	Lys 295	Gln	Lys	Glu	Lys	Ala 300	Ala	Ser	Leu	Lys
Arg 305	Asp	Met	Pro	Lys	Val 310	Leu	His	Asp	Ser	Ser 315	Lys	Asp	Ser	Ile	Thr 320

Val Phe Val Ser Asn Leu Pro Tyr Ser Met Gln Glu Pro Asp Thr Lys Leu Arg Pro Leu Phe Glu Ala Cys Gly Glu Val Val Gln Ile Arg Pro Ile Phe Ser Asn Arg Gly Asp Phe Arg Gly Tyr Cys Tyr Val Glu Phe Lys Glu Glu Lys Ser Ala Leu Gln Ala Leu Glu Met Asp Arg Lys Ser Val Glu Gly Arg Pro Met Phe Val Ser Pro Cys Val Asp Lys Ser Lys Asn Pro Asp Phe Lys Val Phe Arg Tyr Ser Thr Ser Leu Glu Lys His Lys Leu Phe Ile Ser Gly Leu Pro Phe Ser Cys Thr Lys Glu Glu Leu Glu Glu Ile Cys Lys Ala His Gly Thr Val Lys Asp Leu Arg Leu Val Thr Asn Arg Ala Gly Lys Pro Lys Gly Leu Ala Tyr Val Glu Tyr Glu Asn Glu Ser Gln Ala Ser Gln Ala Val Met Lys Met Asp Gly Met Thr Ile Lys Glu Asn Ile Ile Lys Val Ala Ile Ser Asn Pro Pro Gln Arg Lys Val Pro Glu Lys Pro Glu Thr Arg Lys Ala Pro Gly Gly Pro Met Leu Leu Pro Gln Thr Tyr Gly Ala Arg Gly Lys Gly Arg Thr Gln Leu Ser Leu Leu Pro Arg Ala Leu Gln Arg Pro Ser Ala Ala Ala Pro Gln Ala Glu Asn Gly Pro Ala Ala Ala Pro Ala Val Ala Ala Pro Ala Ala Thr Glu Ala Pro Lys Met Ser Asn Ala Asp Phe Ala Lys Leu Phe Leu

Arg Lys

<210> 1497 <211> 316 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (62) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (214) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1497 Pro Trp Ser Ala Ala Ala Gly Leu Arg Ala Gly Val Arg Val Pro Arg Ser Pro Gly Pro Ser Arg Arg Met Pro Ala Arg Ser Gly Ala Gln Phe 20 25 Cys Arg Arg Met Gly Gln Lys Lys Gln Arg Pro Ala Arg Ala Gly Gln Pro His Ser Ser Ser Asp Ala Ala Gln Ala Pro Ala Glu Xaa Pro His 55 Ser Ser Ser Asp Ala Ala Gln Ala Pro Cys Pro Arg Glu Arg Cys Leu 65 70 75 Gly Pro Pro Thr Thr Pro Gly Pro Tyr Arg Ser Ile Tyr Phe Ser Ser Pro Lys Gly His Leu Thr Arg Leu Gly Leu Glu Phe Phe Asp Gln Pro 105 Ala Val Pro Leu Ala Arg Ala Phe Leu Gly Gln Val Leu Val Arg Arg 115 120 Leu Pro Asn Gly Thr Glu Leu Arg Gly Arg Ile Val Glu Thr Glu Ala 130 135 Tyr Leu Gly Pro Glu Asp Glu Ala Ala His Ser Arg Gly Gly Arg Gln Thr Pro Arg Asn Arg Gly Met Phe Met Lys Pro Gly Thr Leu Tyr Val

165

Tyr Ile Ile Tyr Gly Met Tyr Phe Cys Met Asn Ile Ser Ser Gln Gly
180 185 190

Asp Gly Ala Cys Val Leu Leu Arg Ala Leu Glu Pro Leu Glu Gly Leu 195 200 205

Glu Thr Met Arg Gln Xaa Arg Ser Thr Leu Arg Lys Gly Thr Ala Ser 210 215 220

Arg Val Leu Lys Asp Arg Glu Leu Cys Ser Gly Pro Ser Lys Leu Cys 225 230 235 240

Gln Ala Leu Ala Ile Asn Lys Ser Phe Asp Gln Arg Asp Leu Ala Gln 245 250 255

Asp Glu Ala Val Trp Leu Glu Arg Gly Pro Leu Glu Pro Ser Glu Pro 260 265 270

Ala Val Val Ala Ala Ala Arg Val Gly Val Gly His Ala Gly Glu Trp 275 280 285

Ala Arg Lys Pro Leu Arg Phe Tyr Val Arg Gly Ser Pro Trp Val Ser 290 295 300

Val Val Asp Arg Val Ala Glu Gln Asp Thr Gln Ala 305 310 315

<210> 1498

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1498

Lys Cys Asn Tyr Val Leu Ser Ala Ser Lys Phe Lys Thr Tyr Trp Asn 1 $$ 5 $$ 10 $$ 15

Val Glu Ser Val Val Thr Lys Tyr Val Arg Arg Thr Lys Gly Met Cys
20 25 30

Lys Ser Leu Met Pro Ile Ser Ser Glu Asn Leu Ser Lys Leu Thr Gly
35 40 45

Pro Ala Glu Thr Ala His Ser Ala Arg Arg Asn His Asp Ile Ala Leu $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$

Pro Cys Gly Arg Ser Thr Cys Leu Glu Asn Thr Val Leu Tyr Tyr His 65 70 75 80

Tyr Gly

<210> 1499

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1499

Ser Cys Cys Leu Glu Asn Tyr Ser Phe Leu Ser Trp Ser Ala Asp Arg 1 5 10 15

Asn Ser His Thr Asn Leu Ile Gly Leu Lys Cys Ile Phe Arg Gln Gln 20 25 30

Gly Thr Lys Gln Arg Gly Thr Gly Leu Leu Asp Trp Arg Lys Ser Leu 35 40 45

Leu Ala Trp Trp Ala Val Phe Gln Glu Arg Pro Cys Pro Cys Ser Leu $50 \hspace{1cm} 55 \hspace{1cm} 60$

Leu Gly Thr Phe Gln Phe Arg Phe Pro Leu Val 65 70 75

<210> 1500

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1500

Lys Arg Ser Trp Ala Gly Gly Arg Ala Arg Arg Lys Leu Phe Gly Gly
1 5 10 15

Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu 20 25 30

Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Ser Leu 35 40 45

Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala 50 60

Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe 65 70 75 80

Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp 85 90 95 Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn 100 105 110

Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr 115 120 125

Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 130 135 140

<210> 1501

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1501

Val Leu Pro Gly Gly Ser Leu Lys Val Gln Lys Cys Cys Pro Lys Pro 1 5 10 15

Ser Leu Asn Ile Ser Gly Asn Arg Ser Cys Ser Thr Met Gly Val Gln
20 25 30

Cys Pro Cys Leu Pro Leu Thr Gln Leu Trp Phe Ile Leu Leu Val Cys
35 40 45

Leu His Arg Pro Asp Ala Arg Val Pro Cys Leu Ile Leu His Leu Leu 50 55 60

Ser His Trp Gly Ser Leu Pro Ser Asp Ala Leu Ala Lys Ile Ala Leu 65 70 75 80

Val Cys Ser Arg Lys Glu Gly Gln Ile Pro Gly Ile Val Arg Ala Ala 85 90 95

Glu Leu Tyr Arg Ile Gly Leu Pro Phe Pro Pro Val Trp Leu Ala Leu 100 105 110

His Ser Leu Gln Ile Pro Pro Thr Ser Thr Gln 115 120

<210> 1502

<211> 426

<212> PRT

<213> Homo sapiens

<400> 1502															
Glu 1	Ile	Tyr	Ser	Leu 5	Ser	Arg	Phe	Ile	Glu 10	Val	Lys	Met	Ser	Lys 15	Lys
Ile	Ser	Gly	Gly 20	Ser	Val	Val	Glu	Met 25	Gln	Gly	Asp	Glu	Met 30	Thr	Arg
Ile	Ile	Trp 35	Glu	Leu	Ile	Lys	Glu 40	Lys	Leu	Ile	Phe	Pro 45	Tyr	Val	Glu
Leu	Asp 50	Leu	His	Ser	Tyr	Asp 55	Leu	Gly	Ile	Glu	Asn 60	Arg	Asp	Ala	Thr
Asn 65	Asp	Gln	Val	Thr	Lys 70	Asp	Ala	Ala	Glu	Ala 75	Ile	Lys	Lys	His	Asn 80
Val	Gly	Val	Lys	Cys 85	Ala	Thr	Ile	Thr	Pro 90	Asp	Glu	Lys	Arg	Val 95	Glu
Glu	Phe	Lys	Leu 100	Lys	Gln	Met	Trp	Lys 105	Ser	Pro	Asn	Gly	Thr 110	Ile	Arg
Asn	Ile	Leu 115	Gly	Gly	Thr	Val	Phe 120	Arg	Glu •	Ala	Ile	Ile 125	Cys	Lys	Asn
Ile	Pro 130	Arg	Leu	Val	Ser	Gly 135	Trp	Val	Lys	Pro	Ile 140	Ile	Ile	Gly	Arg
His 145	Ala	Tyr	Gly	Asp	Gln 150	Tyr	Arg	Ala	Thr	Asp 155	Phe	Val	Val	Pro	Gly 160
Pro	Gly	Lys	Val	Glu 165	Ile	Thr	Tyr	Thr	Pro 170	Ser	Asp	Gly	Thr	Gln 175	Lys
Val	Thr	Tyr	Leu 180	Val	His	Asn	Phe	Glu 185	Glu	Gly	Gly	Gly	Val 190	Ala	Met
Gly	Met	Туг 195	Asn	Gln	Asp	Lys	Ser 200	Ile	Glu	Asp	Phe	Ala 205	His	Ser	Ser
Phe	Gln 210	Met	Ala	Leu	Ser	Lys 215	Gly	Trp	Pro	Leu	Туг 220	Leu	Ser	Thr	Lys
Asn 225	Thr	Ile	Leu	Lys	Lys 230	Tyr	Asp	Gly	Arg	Phe 235	Lys	Asp	Ile	Phe	Gln 240
Glu	Ile	Tyr	Asp	Lys 245	Gln	Tyr	Lys	Ser	Gln 250	Phe	Glu	Ala	Gln	Lys 255	Ile
Trp	Tyr	Glu	His 260	Arg	Leu	Ile	Asp	Asp 265	Met	Val	Ala	Gln	Ala 270	Met	Lys

.

Ser Glu Gly Gly Phe Ile Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val 275 280 285

Gln Ser Asp Ser Val Ala Gln Gly Tyr Gly Ser Leu Gly Met Met Thr 290 295 300

Ser Val Leu Val Cys Pro Asp Gly Lys Thr Val Glu Ala Glu Ala Ala 305 310 315 320

His Gly Thr Val Thr Arg His Tyr Arg Met Tyr Gln Lys Gly Gln Glu 325 330 335

Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu 340 345 350

Ala His Arg Ala Lys Leu Asp Asn Asn Lys Glu Leu Ala Phe Phe Ala 355 360 365

Asn Ala Leu Glu Glu Val Ser Ile Glu Thr Ile Glu Ala Gly Phe Met 370 375 380

Thr Lys Asp Leu Ala Ala Cys Ile Lys Gly Leu Pro Asn Val Gln Arg 385 390 395 400

Ser Asp Tyr Leu Asn Thr Phe Glu Phe Met Asp Lys Leu Gly Glu Asn 405 410 415

Leu Lys Ile Lys Leu Ala Gln Ala Lys Leu
420 425

<210> 1503

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1503

Phe Asn Lys Arg Lys Met Lys Tyr Ser Val Ala Tyr Ile Phe His Arg
1 5 10 15

Ala His Glu His Leu Leu Tyr Leu Leu Gly Leu Ala Lys Ile Ile Tyr
20 25 30

Ser Ala Ala Leu Pro Lys Cys Leu His Thr Lys Leu Lys Val Val Leu
35 40 45

Ile Tyr Val Ser Trp Lys Leu Phe Ile Lys Phe Lys Gly Ile Ser Phe 50 60

Arg 65

<210> 1504

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1504

Phe Phe Val Ile Pro Ser Ser Gly Ser Ile Cys Phe Cys Ser Leu Val $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Thr Val Leu Met Phe Asn Cys Cys Thr Leu Lys Pro Lys Ser Val Thr 20 25 30

Met His Thr Val Thr Lys Val Leu Gly Leu Gln Ser Cys Leu Leu Tyr 35 40 45

Lys Glu Asn Phe Lys Cys Cys Cys Lys Leu Thr Ser Tyr Thr Ile Leu 50 60

Asn Phe Leu Ser Ser Pro Leu Phe Leu Pro Thr Asn Gly Ile Ile Met 65 70 75 80

Leu Ala

<210> 1505

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1505

Glu Gly Cys Ala Ala Ala Met Ala Leu Arg Met Leu Trp Ala Gly Gln
1 5 10 15

Ala Lys Gly Ile Leu Gly Gly Trp Gly Ile Ile Cys Leu Val Met Ser 20 25 30

Leu Leu Gln His Pro Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala

• • • • • •

Gln Ala Pro Cys His Tyr Glu Gly Lys Tyr Phe Thr Leu Gly Xaa Ser 50 55 60

Trp Leu Arg Lys Asp Cys Phe His Cys Thr Cys Leu His Pro Val Ala 65 70 75 80

Trp Ala

<210> 1506

<211> 419

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (404)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (405)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1506

Ala Arg Val Asp Arg Glu Thr Arg Ala Leu Ala Asp Ser His Phe Arg

1 10 15

Gly Leu Gly Val Asp Val Pro Gly Val Gly Gln Ala Pro Gly Arg Val 20 25 30

Ala Phe Val Ser Glu Pro Gly Ala Phe Ser Tyr Ala Asp Phe Val Arg 35 40 45

Gly Phe Leu Leu Pro Asn Leu Pro Cys Val Phe Ser Ser Ala Phe Thr 50 60

Gln Gly Trp Gly Ser Arg Arg Trp Val Thr Pro Ala Gly Arg Pro
65 70 75 80

Asp Phe Asp His Leu Arg Thr Tyr Gly Asp Val Val Val Pro Val 85 90 95

Ala Asn Cys Gly Val Gln Glu Tyr Asn Ser Asn Pro Lys Glu His Met 100 105 110

Thr Leu Arg Asp Tyr Ile Thr Tyr Trp Lys Glu Tyr Ile Gln Ala Gly
115 120 125

Tyr	Ser 130	Ser	Pro	Arg	Gly	Cys 135	Leu	Tyr	Leu	Lys	Asp 140	Trp	His	Leu	Cys
Arg 145	Asp	Phe	Pro	Val	Glu 150	Asp	Val	Phe	Thr	Leu 155	Pro	Val	Tyr	Phe	Ser 160
Ser	Asp	Trp	Leu	Asn 165	Glu	Phe	Trp	Asp	Ala 170	Leu	Asp	Val	Asp	Asp 175	Tyr
Arg	Phe	Val	Tyr 180	Ala	Gly	Pro	Ala	Gly 185	Ser	Trp	Ser	Pro	Phe 190	His	Ala
Asp	Ile	Phe 195	Arg	Ser	Phe	Ser	Trp 200	Ser	Val	Asn	Val	Cys 205	Gly	Arg	Lys
Lys	Trp 210	Leu	Leu	Phe	Pro	Pro 215	Gly	Gln	Glu	Glu	Ala 220	Leu	Arg	Asp	Arg
His 225	Gly	Asn	Leu	Pro	Tyr 230	Asp	Val	Thr	Ser	Pro 235	Ala	Leu	Cys	Asp	Thr 240
His	Leu	His	Pro	Arg 245	Asn	Gln	Leu	Ala	Gly 250	Pro	Pro	Leu	Glu	11e 255	Thr
Gln	Glu	Ala	Gly 260	Glu	Met	Val	Phe	Val 265	Pro	Ser	Gly	Trp	His 270	His	Gln
Val	His	Asn 275	Leu	Asp	Asp	Thr	Ile 280	Ser	Ile	Asn	His	Asn 285	Trp	Val	Asn
Gly	Phe 290	Asn	Leu	Ala	Asn	Met 295	Trp	Arg	Phe	Leu	Gln 300	Gln	Glu	Leu	Cys
Ala 305	Val	Gln	Glu	Glu	Val 310	Ser	Glu	Trp	Arg	Asp 315	Ser	Met	Pro	Asp	Trp 320
His	His	His	Cys	Gln 325	Val	Ile	Met	Arg	Ser 330	Cys	Ser	Gly	Ile	Asn 335	Phe
Glu	Glu	Phe	Tyr 340	His	Phe	Leu	Lys	Val 345	Ile	Ala	Glu	Lys	Arg 350	Leu	Leu
Val	Leu	Arg 355	Glu	Ala	Ala	Ala	Glu 360	Asp	Gly	Ala	Gly	Leu 365	Gľy	Phe	Glu
Gln	Ala 370	Ala	Phe	Asp	Val	Gly 375	Arg	Ile	Thr	Glu	Val 380	Leu	Ala	Ser	Leu
Val 385	Ala	His	Pro	Asp	Phe 390	Gln	Arg	Val	Asp	Thr 395	Ser	Ala	Phe	Ser	Pro 400

Gin Pro Lys Xaa Xaa Leu Gin Gin Leu Arg Glu Ala Val Asp Ala Ala 405 410 415

Ala Ala Pro

<210> 1507

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1507

Pro Arg Val Arg Ser Gly Arg Thr Ile Met Gln Ser Ala Met Phe Leu
1 5 10 15

Ala Val Gln His Asp Cys Arg Pro Met Asp Lys Ser Ala Gly Ser Gly 20 25 30

His Lys Ser Glu Glu Lys Arg Glu Lys Met Lys Arg Thr Leu Leu Lys
35 40

Asp Trp Lys Thr Arg Leu Ser Tyr Phe Leu Gln Asn Ser Ser Thr Pro 50 55 60

Gly Lys Pro Lys Thr Gly Lys Lys Ser Lys Gln Gln Ala Phe Ile Lys
65 70 75 80

Pro Ser Pro Glu Glu Ala Gln Leu Trp Ser Glu Ala Phe Asp Glu Leu 85 90 95

Leu Ala Ser Lys Tyr Gly Leu Ala Ala Phe Arg Ala Phe Leu Lys Ser 100 105 110

Glu Phe Cys Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp Phe 115 120 125

Lys Lys Thr Lys Ser Pro Gln Lys Leu Ser Ser Lys Ala Arg Lys Ile

Tyr Thr Asp Phe Ile Glu Lys Glu Ala Pro Lys Glu Ile Asn Ile Asp 155 160

Phe Gln Thr Lys Thr Leu Ile Ala Gln Asn Ile Gln Glu Ala Thr Ser 165 170 175

Gly Cys Phe Thr Thr Ala Gln Lys Arg Val Tyr Ser Leu Met Glu Asn 180 185 190

Asn Ser Tyr Pro Arg Phe Leu Glu Ser Glu Phe Tyr Gln Asp Leu Cys

195 200 205

Lys Lys Pro Gln Ile Thr Thr Glu Pro His Ala Thr 210 215 220

<210> 1508

<211> 339

<212> PRT

<213> Homo sapiens

<400> 1508

Phe Gly Thr Arg Arg Ser Gly Cys Pro Ala Arg Gly His Ser Glu Pro
1 5 10 15

Gly Gly Arg Glu Glu Gly Met Pro Gln Thr Val Ile Leu Pro Gly
20 25 30

Pro Ala Pro Trp Gly Phe Arg Leu Ser Gly Gly Ile Asp Phe Asn Gln 35 40 45

Pro Leu Val Ile Thr Arg Ile Thr Pro Gly Ser Lys Ala Ala Ala Ala 50 55 60

Asn Leu Cys Pro Gly Asp Val Ile Leu Ala Ile Asp Gly Phe Gly Thr 65 70 75 80

Glu Ser Met Thr His Ala Asp Ala Gln Asp Arg Ile Lys Ala Ala Ala 85 90 95

His Gln Leu Cys Leu Lys Ile Asp Arg Gly Glu Thr His Leu Trp Ser 100 105 110

Pro Gln Val Ser Glu Asp Gly Lys Ala His Pro Phe Lys Ile Asn Leu 115 120 125

Glu Ser Glu Pro Gln Glu Phe Lys Pro Ile Gly Thr Ala His Asn Arg 130 135 140

Arg Ala Gln Pro Phe Val Ala Ala Ala Asn Ile Asp Asp Lys Arg Gln 145 150 155 160

Val Val Ser Ala Ser Tyr Asn Ser Pro Ile Gly Leu Tyr Ser Thr Ser 165 170 175

Asn Ile Gln Asp Ala Leu His Gly Gln Leu Arg Gly Leu Ile Pro Ser 180 185 190

Ser Pro Gln Asn Glu Pro Thr Ala Ser Val Pro Pro Glu Ser Asp Val 195 200 205 Tyr Arg Met Leu His Asp Asn Arg Asn Glu Pro Thr Gln Pro Arg Gln 210 215 220

Ser Gly Ser Phe Arg Val Leu Gln Gly Met Val Asp Asp Gly Ser Asp 225 230 235 240

Asp Arg Pro Ala Gly Thr Arg Ser Val Arg Ala Pro Val Thr Lys Val 245 250 255

His Gly Gly Ser Gly Gly Ala Gln Arg Met Pro Leu Cys Asp Lys Cys 260 265 270

Gly Ser Gly Ile Val Gly Ala Val Val Lys Ala Arg Asp Lys Tyr Arg 275 280 285

His Pro Glu Cys Phe Val Cys Ala Asp Cys Asn Leu Asn Leu Lys Gln 290 295 300

Lys Gly Tyr Phe Phe Ile Glu Gly Glu Leu Tyr Cys Glu Thr His Ala 305 310 315 320

Arg Ala Arg Thr Lys Pro Pro Glu Gly Tyr Asp Thr Val Thr Leu Tyr 325 330 335

Pro Lys Ala

<210> 1509

<211> 388

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (226)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1509

Leu Gly Arg Val Ser Met Ser Leu Gly Trp Leu Glu Arg Pro Pro Ala
1 5 10 15

Leu Ser Arg Ala Ala Gly Asp Gly Ala Arg Arg Leu Ser Gly Ser Arg
20 25 30

Arg Gly Asp Val Trp Leu Thr Ser Ser Ala Ala Gly Leu Leu Arg Ser 35 40 45

Val Ala Gly Gly Ser Trp Cys Gly Gly Gln Leu Arg Ala Arg Gly Gly

50 55 60 Ser Gly Arg Cys Val Ala Arg Ala Met Thr Gly Asn Ala Gly Glu Trp 75 Cys Leu Met Glu Ser Asp Pro Gly Val Phe Thr Glu Leu Ile Lys Gly 90 Phe Gly Cys Arg Gly Ala Gln Val Glu Glu Ile Trp Ser Leu Glu Pro Glu Asn Phe Glu Lys Leu Lys Pro Val His Gly Leu Ile Phe Leu Phe 120 Lys Trp Gln Pro Gly Glu Glu Pro Ala Gly Ser Val Val Gln Asp Ser 135 Arg Leu Asp Thr Ile Phe Phe Ala Lys Gln Val Ile Asn Asn Ala Cys 145 150 155 Ala Thr Gln Ala Ile Val Ser Val Leu Leu Asn Cys Thr His Gln Asp 170 Val His Leu Gly Glu Thr Leu Ser Glu Phe Lys Glu Phe Ser Gln Ser 185 Phe Asp Ala Ala Met Lys Gly Leu Ala Leu Ser Asn Ser Asp Val Ile 195 200 Arg Gln Val His Asn Ser Phe Ala Arg Gln Gln Met Phe Glu Phe Asp Thr Xaa Thr Ser Ala Lys Glu Glu Asp Ala Phe His Phe Val Ser Tyr 230 235 Val Pro Val Asn Gly Arg Leu Tyr Glu Leu Asp Gly Leu Arg Glu Gly 245 250 Pro Ile Asp Leu Gly Ala Cys Asn Gln Asp Asp Trp Phe Ser Ala Val 265 Arg Pro Val Ile Glu Lys Arg Ile Gln Lys Tyr Ser Glu Gly Glu Ile 280 285 Arg Phe Asn Leu Met Ala Ile Val Ser Asp Arg Lys Met Ile Tyr Glu 290 295 Gln Lys Ile Ala Glu Leu Gln Arg Gln Leu Ala Glu Glu Pro Met Asp 310 315 Thr Asp Gln Gly Asn Ser Met Leu Ser Ala Ile Gln Ser Glu Val Ala

325 330 335

Lys Asn Gln Met Leu Ile Glu Glu Glu Val Gln Lys Leu Lys Arg Tyr 340 345 350

Lys Ile Glu Asn Ile Arg Arg Lys His Asn Tyr Leu Pro Phe Ile Met 355 360 365

Glu Leu Leu Lys Thr Leu Ala Glu His Gln Gln Leu Ile Pro Leu Val 370 375 380

Glu Lys Gly Lys 385

<210> 1510

<211> 260

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1510

Arg Gly Gln Val Pro Ser Ser Leu Ala His Gly Cys Val Arg Pro
1 5 10 15

Gly Glu Pro Ser Trp Pro Gly Glu Pro Ser Trp Pro Ala Arg Val Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Arg Gln Val Leu Tyr Pro Arg Phe Gln Ser Arg Gly Pro Gln 35 40 45

Gly Val Glu Asp Gly Asp Arg Pro Gln Pro Ser Ser Lys Thr Pro Arg
50 55 60

Ile Pro Lys Ile Tyr Thr Lys Thr Gly Asp Lys Gly Phe Ser Ser Thr 65 70 75 80

Phe Thr Gly Glu Arg Arg Pro Lys Asp Asp Gln Val Phe Glu Ala Val 95 95

Gly Thr Thr Asp Glu Leu Ser Ser Ala Ile Gly Phe Ala Leu Glu Leu 100 105 110

Val Thr Glu Lys Gly His Thr Phe Ala Glu Glu Leu Gln Lys Ile Gln 115 120 125

Cys Thr Leu Gln Asp Val Gly Ser Ala Leu Ala Thr Pro Cys Ser Ser 135 Ala Arg Glu Ala His Leu Lys Tyr Thr Thr Phe Lys Ala Gly Pro Ile 150 155 Leu Glu Leu Glu Gln Trp Ile Asp Lys Tyr Thr Ser Gln Leu Pro Pro 165 170 Leu Thr Ala Phe Ile Leu Pro Ser Gly Gly Lys Ile Ser Ser Ala Leu 185 His Phe Cys Arg Ala Val Cys Arg Arg Ala Glu Arg Arg Val Val Pro 195 200 Leu Val Gln Met Gly Glu Thr Asp Ala Asn Val Ala Lys Phe Leu Asn 215 Arg Leu Ser Asp Tyr Leu Phe Thr Leu Ala Arg Tyr Ala Ala Met Lys 230 235 Glu Gly Asn Gln Glu Lys Ile Tyr Xaa Lys Asn Asp Pro Ser Ala Glu 245 250 Ser Glu Gly Leu 260 <210> 1511 <211> 288 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (162) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1511 Gln His Phe His Phe Arg Lys Pro Thr Asp Val Leu Gln Thr Val Lys 10 Leu Leu Asp Leu Ser Ser Asn Gln Leu Ile Asp Glu Asn Gln Leu Tyr 25 Leu Ile Ala His Leu Pro Arg Leu Glu Gln Leu Ile Leu Ser Asp Thr 35

Gly Ile Ser Ser Leu His Phe Pro Asp Ala Gly Ile Gly Cys Lys Thr

60

55

50

Ser Met Phe Pro Ser Leu Lys Tyr Leu Val Val Asn Asp Asn Gln Ile Ser Gln Trp Ser Phe Phe Asn Glu Leu Glu Lys Leu Pro Ser Leu Arg 90 Ala Leu Ser Cys Leu Arg Asn Pro Leu Thr Lys Glu Asp Lys Glu Ala 105 Glu Thr Ala Arg Leu Leu Ile Ile Ala Ser Ile Gly Gln Leu Lys Thr Leu Asn Lys Cys Glu Ile Leu Pro Glu Glu Arg Arg Arg Ala Glu Leu 135 Asp Tyr Arg Lys Ala Phe Gly Asn Glu Trp Lys Gln Ala Gly Gly His 150 155 Lys Xaa Pro Glu Lys Asn Arg Leu Ser Glu Glu Phe Leu Thr Ala His 165 170 Pro Arg Tyr Gln Phe Leu Cys Leu Lys Tyr Gly Ala Pro Glu Asp Trp Glu Leu Lys Thr Gln Gln Pro Leu Met Leu Lys Asn Gln Leu Leu Thr 200 Leu Lys Ile Lys Tyr Pro His Gln Leu Asp Gln Lys Val Leu Glu Lys 210 215 Gln Leu Pro Gly Ser Met Thr Ile Gln Lys Val Lys Gly Leu Leu Ser 225 230 235 Arg Leu Leu Lys Val Pro Val Ser Asp Leu Leu Ser Tyr Glu Ser 250 Pro Lys Lys Pro Gly Arg Glu Ile Glu Leu Glu Asn Asp Leu Lys Ser 260

Leu Gln Phe Tyr Ser Val Glu Asn Gly Asp Cys Leu Leu Val Arg Trp

285

280

<210> 1512

275

<211> 123

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1512

Lys Cys Pro Arg Glu Pro Leu Val His Arg Arg Phe Val Ser Thr Leu
1 5 10 15

Pro Ile Phe Thr Ala Leu Ala Leu Gln Ala Trp Gly Ser Ile Cys Ser 20 25 30

Ser His Val Lys Ser Gly Pro Ala Phe Leu Asn Ser Val Gln Ala Asp 35 40 45

Leu Phe Ser Cys Thr Gly Ile Ser Tyr Gln Pro Asn Ile Cys Ile Glu
50 55 60

Gln Arg Gly Leu Cys Ala Pro Pro Xaa Met Ala Ala Met Met Ala Ala 65 70 75 80

Val Ile His Ala His Leu Gln Thr Ser Gln Ser Gly Ser Glu Met Ser 85 90 95

Thr Asn Ile Cys Gly Arg Lys Gly Tyr Thr Asp His Pro Val Val Leu 100 105 110

Gln Leu Tyr Arg Ala Arg Lys Gly Cys Gly Lys 115 120

<210> 1513

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1513

Ala Asp Gly Gly Trp Gly Glu Asp Phe Glu Ser Cys Glu Glu Arg Arg
1 5 10 15

Tyr Val Gln Ser Ala Gln Ser Gln Ile His Asn Thr Cys Trp Ala Met
20 25 30

Met Gly Leu Met Ala Val Arg His Pro Asp Ile Glu Ala Gln Glu Arg 35 40 45

Gly Val Arg Cys Leu Leu Glu Lys Gln Leu Pro Asn Gly Asp Trp Pro 50 60

Gln Glu Asn Ile Ala Gly Val Phe Asn Lys Ser Cys Ala Ile Ser Tyr 65 70 75 80

Thr Ser Tyr Arg Asn Ile Phe Pro Ile Trp Ala Leu Gly Arg Phe Ser 85 90 95

Gln Leu Tyr Pro Glu Arg Ala Leu Ala Gly His Pro 100 105

<210> 1514

<211> 33

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1514

Ser Trp Xaa Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro 1 5 10 15

Pro Gly Cys Arg Asn Ser Ala Arg Val Ser Leu Phe Val Cys Phe Phe
20 25 30

Leu

<210> 1515

<211> 479

<212> PRT

<213> Homo sapiens

<400> 1515

Gly Thr Arg Arg Pro Ser Ser Ser Val Arg Ser Gly Ser Trp Ser Arg
1 5 10 15

Leu Pro Gly Tyr Arg Gly Ala Ser Met Thr Thr Met Ala Ala Ala Thr
20 25 30

Leu Leu Arg Ala Thr Pro His Phe Ser Gly Leu Ala Ala Gly Arg Thr $35 \hspace{1cm} 40 \hspace{1cm} 45$

Phe Leu Leu Gln Gly Leu Leu Arg Leu Leu Lys Ala Pro Ala Leu Pro 50 55 60

Leu 65	Leu	Cys	Arg	Gly	Leu 70	Ala	Val	Glu	Ala	Lys 75	Lys	Thr	Tyr	Val	Arg 80
Asp	Lys	Pro	His	Val 85	Asn	Val	Gly	Thr	Ile 90	Gly	His	Val	Asp	His 95	Gly
Lys	Thr	Thr	Leu 100	Thr	Ala	Ala	Ile	Thr 105	Lys	Ile	Leu	Ala	Glu 110	Gly	Gly
Gly	Ala	Lys 115	Phe	Lys	Lys	Tyr	Glu 120	Glu	Ile	Asp	Asn	Ala 125	Pro	Glu	Glu
Arg	Ala 130	Arg	Gly	Ile	Thr	11e 135	Asn	Ala	Ala	His	Val 140	Glu	Tyr	Ser	Thr
Ala 145	Ala	Arg	His	Tyr	Ala 150	His	Thr	Asp	Cys	Pro 155	Gly	His	Ala	Asp	Tyr 160
Val	Lys	Asn	Met	Ile 165	Thr	Gly	Thr	Ala	Pro 170	Leu	Asp	Gly	Суѕ	11e 175	Leu
Val	Val	Ala	Ala 180	Asn	Asp	Gly	Pro	Met 185	Pro	Gln	Thr	Arg	Glu 190	His	Leu
Leu	Leu	Ala 195	Arg	Gln	Ile	Gly	Val 200	Glu	His	Val	Val	Val 205	Tyr	Val	Asn
Lys	Ala 210	Asp	Ala	Val	Gln	Asp 215	Ser	Glu	Met	Val	Glu 220	Leu	Val	Glu	Leu
Glu 225	Ile	Arg	Glu	Leu	Leu 230	Thr	Glu	Phe	Gly	Туг 235	Lys	Gly	Glu	Glu	Thr 240
Pro	Val	Ile	Val	Gly 245	Ser	Ala	Leu	Cys	Ala 250	Leu	Glu	Gly	Arg	Asp 255	Pro
Glu	Leu	Gly	Leu 260	Lys	Ser	Val	Gln	Lys 265	Leu	Leu	Asp	Ala	Val 270	Asp	Thr
Tyr	Ile	Pro 275	Val	Pro	Ala	Arg	Asp 280	Leu	Glu	Lys	Pro	Phe 285	Leu	Leu	Pro
Val	Glu 290	Ala	Val	Tyr	Ser	Val 295	Pro	Gly	Arg	Gly	Thr 300	Val	Val	Thr	Gly
Thr 305	Leu	Glu	Arg	Gly	Ile 310	Leu	Lys	Lys	Gly	Asp 315	Glu	Cys	Glu	Leu	Leu 320
Gly	His	Ser	Lys	Asn 325	Ile	Arg	Thr	Val	Val 330	Thr	Gly	Ile	Glu	Met 335	Phe

His Lys Ser Leu Glu Arg Ala Glu Ala Gly Asp Asn Leu Gly Ala Leu 340 345 350

Val Arg Gly Leu Lys Arg Glu Asp Leu Arg Arg Gly Leu Val Met Val
355 360 365

Lys Pro Gly Ser Ile Lys Pro His Gln Lys Val Glu Ala Gln Val Tyr 370 375 380

Ile Leu Ser Lys Glu Glu Gly Gly Arg His Lys Pro Phe Val Ser His 385 390 395 400

Phe Met Pro Val Met Phe Ser Leu Thr Trp Asp Met Ala Cys Arg Ile 405 410 415

Ile Leu Pro Pro Glu Lys Glu Leu Ala Met Pro Gly Glu Asp Leu Lys
420 425 430

Phe Asn Leu Ile Leu Arg Gln Pro Met Ile Leu Glu Lys Gly Gln Arg
435 440 445

Phe Thr Leu Arg Asp Gly Asn Arg Thr Ile Gly Thr Gly Leu Val Thr 450 455 460

Asn Thr Leu Ala Met Thr Glu Glu Lys Asn Ile Lys Trp Gly 465 470 475

<210> 1516

<211> 627

<212> PRT

<213> Homo sapiens

<400> 1516

Arg Gln Glu Leu Ile Trp Pro Leu Cys Ser Pro Pro Gln Gly Asp Arg

1 5 10 15

Phe Leu Gln Lys Ser Trp Ile Phe Phe Arg Pro Val Met Ala Asp Lys
20 25 30

Leu Thr Arg Ile Ala Ile Val Asn His Asp Lys Cys Lys Pro Lys Lys 35 40 45

Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val Arg Met Gly Lys 50 55 60

Leu Cys Ile Glu Val Thr Pro Gln Ser Lys Ile Ala Trp Ile Ser Glu 65 70 75 80

Thr	Leu	Cys	Ile	Gly 85	Cys	Gly	Ile	Cys	Ile 90	Lys	Lys	Cys	Pro	Phe 95	Gly		
Ala	Leu	Ser	Ile 100	Val	Asn	Leu	Pro	Ser 105	Asn	Leu	Glu	Lys	Glu 110	Thr	Thr		
His	Arg	Tyr 115	Cys	Ala	Asn	Ala	Phe 120	Lys	Leu	His	Arg	Leu 125	Pro	Ile	Pro		
Arg	Pro 130	Gly	Glu	Val	Leu	Gly 135	Leu	Val	Gly	Thr	Asn 140	Gly	Ile	Gly	Lys		
Ser 145	Thr	Ala	Leu	Lys	Ile 150	Leu	Ala	Gly	Lys	Gln 155	Lys	Pro	Asn	Leu	Gly 160		
Lys	Tyr	Asp	Asp	Pro 165	Pro	Asp	Trp	Gln	Glu 170	Ile	Leu	Thr	Tyr	Phe 175	Arg		
Gly	Ser	Glu	Leu 180	Gln	Asn	Tyr	Phe	Thr 185	Lys	Ile	Leu	Glu	Asp 190	Asp	Leu		
Lys	Ala	11e 195	Ile	Lys	Pro	Gln	Tyr 200	Val	Asp	Gln	Ile	Pro 205	Lys	Ala	Ala		
Lys	Gly 210	Thr	Val	Gly	Ser	Ile 215	Leu	Asp	Arg	Lys	Asp 220	Glu	Thr	Lys	Thr		
Gln 225	Ala	Ile	Val	Суз	Gln 230	Gln	Leu	Asp	Leu	Thr 235	His	Leu	Lys	Glu	Arg 240		
Asn	Val	Glu	Asp	Leu 245	Ser	Gly	Gly	Glu	Leu 250	Gln	Arg	Phe	Ala	Cys 255	Ala	٠	
Val	Val	Cys	Ile 260	Gln	Lys	Ala	Asp	Ile 265	Phe	Met	Phe	Asp	Glu 270	Pro	Ser		
Ser	Tyr	Leu 275	Asp	Val	Lys	Gln	Arg 280	Leu	Lys	Ala	Ala	Ile 285	Thr	Ile	Arg		
Ser	Leu 290	Ile	Asn	Pro	Asp	Arg 295	Tyr	Ile	Ile	Val	Val 300	Glu	His	Asp	Leu		
Ser 305	Val	Leu	Asp	Tyr	Leu 310	Ser	Asp	Phe	Ile	Cys 315	Cys	Leu	Tyr	Gly	Val 320		
Pro	Ser	Ala	Tyr	Gly 325	Val	Val	Thr	Met	Pro 330	Phe	Ser	Val	Arg	Glu 335	Gly		
Ile	Asn	Ile	Phe 340	Leu	Asp	Gly	Tyr	Val 345	Pro	Thr	Glu	Asn	Leu 350	Arg	Phe		

Arg	Asp	Ala 355	Ser	Leu	Val	Phe	Lys 360	Val	Ala	Glu	Thr	Ala 365	Asn	Glu	Glu
Glu	Val 370	Lys	Lys	Met	Cys	Met 375	Tyr	Lys	Tyr	Pro	Gly 380	Met	Lys	Lys	Lys
Met 385	Gly	Glu	Phe	Glu	Leu 390	Ala	Ile	Val	Ala	Gly 395	Glu	Phe	Thr	Asp	Ser 400
Glu	Ile	Met	Val	Met 405	Leu	Gly	Glu	Asn	Gly 410	Thr	Gly	Lys	Thr	Thr 415	Phe
Ile	Arg	Met	Leu 420	Ala	Gly	Arg	Leu	Lys 425	Pro	Asp	Glu	Gly	Gly 430	Glu	Val
Pro	Val	Leu 435	Asn	Val	Ser	Tyr	Lys 440	Pro	Gln	Lys	Ile	Ser 445	Pro	Lys	Ser
Thr	Gly 450	Ser	Val	Arg	Gln	Leu 455	Leu	His	Glu	Lys	Ile 460	Arg	Asp	Ala	Tyr
Thr 465	His	Pro	Gln	Phe	Val 470	Thr	Asp	Val	Met	Lys 475	Pro	Leu	Gln	Ile	Glu 480
Asn	Ile	Ile	Asp	Gln 485	Glu	Val	Gln	Thr	Leu 490	Ser	Gly	Gly	Glu	Leu 495	Gln
Arg	Val	Ala	Leu 500	Ala	Leu	Cys	Leu	Gly 505	Lys	Pro	Ala	Asp	Val 510	Tyr	Leu
Ile	Asp	Glu 515	Pro	Ser	Ala	Tyr	Leu 520	Asp	Ser	Glu	Gln	Arg 525	Leu	Met	Ala
Ala	Arg 530	Val	Val	Lys	Arg	Phe 535	Ile	Leu	His	Ala	Lys 540	Lys	Thr	Ala	Phe
Val 545	Val	Glu	His	Asp	Phe 550	Ile	Met	Ala	Thr	Tyr 555	Leu	Ala	Asp	Arg	Val 560
Ile	Val	Phe	Asp	Gly 565	Val	Pro	Ser	Lys	Asn 570	Thr	Val	Ala	Asn	Ser 575	Pro
Gln	Thr	Leu	Leu 580	Ala	Gly	Met [.]	Asn-	Lys [.] 585	Phe	Leu	Ser	Gln	Leu 590	Glu	Ile
Thr	Phe	Arg 595	Arg	Asp	Pro	Asn	Asn 600	Tyr	Arg	Pro	Arg	Ile 605	Asn	Lys	Leu
Asn	Ser 610	Ile	Lys	Asp	Val	Glu 615	Gln	Lys	Lys	Ser	Gly 620	Asn	Tyr	Phe	Phe

```
Leu Asp Asp
625
```

<210> 1517

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1517

Ala Pro Gln Pro Pro Pro Thr Gly Gln Ser Asp Tyr Thr Lys Ala Trp

1 5 10 15

Glu Glu Tyr Tyr Lys Lys Ile Gly Gln Gln Pro Gln Gln Pro Gly Ala 20 25 30

Pro Pro Gln Gln Asp Tyr Thr Lys Ala Trp Glu Glu Tyr Tyr Lys Lys
35 40 45

Gln Ala Gln Val Ala Thr Gly Gly Val Gln Glu Leu Pro Gln Ala Pro 50 55 60

Ser Gln Thr Thr Val Pro Pro Gly Glu Tyr Tyr Arg Gln Gln Ala Ala 65 70 75 80

Tyr Tyr Gly Gln Thr Pro Gly Pro Gly Pro Gln Xaa Xaa Pro Thr 85 90 95

Gln Gln Gln Gln Gln Ala Gln 100

<210> 1518

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1518

His Met Thr Thr Val Ser Pro Asp Cys Val Glu Cys Met Ala Cys Ser

10 Asp Asn Thr Val Arg Ala Gly Leu Thr Pro Lys Phe Ile Asp Val Pro 25 Thr Leu Cys Glu Met Leu Ser Tyr Thr Pro Ser Ser Ser Lys Asp Arg Leu Phe Leu Pro Thr Arg Ser Gln Glu Asp Pro Tyr Leu Ser Ile Tyr Asp Pro Pro Val Pro Asp Phe Thr Ile Met Lys Thr Glu Val Pro Gly 70 Ser Val Thr Glu Tyr Lys Val Leu Ala Leu Asp Ser Ala Ser Ile Leu 90 Leu Met Val Gln Gly Thr Val Ile Ala Ser Thr Pro Thr Thr Gln Thr 100 Pro Ile Pro Leu Gln Arg Gly Gly Val Leu Phe Ile Gly Ala Asn Glu 120 Ser Val Ser Leu Lys Leu Thr Glu Pro Lys Asp Leu Leu Ile Phe Arg 135 Ala Cys Cys Leu Leu 145 <210> 1519 <211> 616 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> . . . <221> SITE <222> (262) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1519 Ser Trp Gln Val Gln Gly Pro Pro Pro Arg Glu Xaa Cys Pro Ser Cys Thr Gln Ser Ala Ile Arg Gly Ser Cys Thr Leu Leu Leu Arg Ala Gly

20 25 30

Glu Asp Ser Ala Asp Gln Gly Arg Gly Gln Gln Gln His Phe His Phe 35 40 . 45

His Thr Ser Ile Phe Leu Arg Gly Pro Pro Gly Ser Ser Pro Gln Pro 50 55 60

Ala Pro Leu Arg Leu Arg Asp Trp Ala Leu Cys Leu Gly Leu His Asn 65 70 75 80

Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr Ser Ser His Val Ser 85 90 95

Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser Ala Ala Leu Thr Ile 100 105 110

Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro Pro Glu Val Ala Ser 115 120 125

Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser Asn Met Val Arg Ala 130 135 140

Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His Ala His Ala Leu Asn 145 150 155 160

Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Lys Glu Gln Asp Asn 165 170 175

Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Glu Ala Ala Lys Gly 180 185 190

Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val Ala His Gln Trp Phe 195 200 205

Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser Thr Ala Arg Glu Gly 210 215 220

Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala Gly Gly Glu Ala Gly 225 230 235 240

Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly Thr Glu Pro Val Thr 245 250 255

Val Ala Ala Ala Gln Xaa Thr Ala Ala Ala Thr Val Val Pro Val Ile
260 265 270

Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly Leu Gly His Gly His 275 280 285

Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln Pro His Leu Pro Cys

	290					295					300				
Ser 305	Pro	Gln	Tyr	Leu	Thr 310	His	Pro	Ala	His	Pro 315	Ala	His	Pro	Met	Pro 320
His	Met	Pro	Arg	Pro 325	Ala	Val	Phe	Pro	Val 330	Pro	Ser	Ser	Ala	Tyr 335	Pro
Gln	Gly	Val	His 340	Pro	Ala	Phe	Leu	Gly 345	Ala	Gln	Tyr	Pro	Tyr 350	Ser	Val
Thr	Pro	Pro 355	Ser	Leu	Ala	Ala	Thr 360	Ala	Val	Ser	Phe	Pro 365	Val	Pro	Ser
Met	Ala 370	Pro	Ile	Thr	Val	His 375	Pro	Tyr	His	Thr	Glu 380	Pro	Gly	Leu	Pro
Leu 385	Pro	Thr	Ser	Val	Ala 390	Leu	Ser	Ser	Val	His 395	Pro	Ala	Ser	Thr	Phe 400
Pro	Ala	Ile	Gln	Gly 405	Ala	Ser	Leu	Pro	Ala 410	Leu	Thr	Thr	Gln	Pro 415	Ser
Pro	Leu	Val	Ser 420	Gly	Gly	Phe	Pro	Pro 425	Pro	Glu	Glu	Glu	Thr 430	His	Ser
Gln	Pro	Val 435	Asn	Pro	His	Ser	Leu 440	His	His	Leu	His	Ala 445	Ala	Tyr	Arg
Val	Gly 450	Met	Leu	Ala	Leu	Glu 455	Met	Leu	Gly	Arg	Arg 460	Ala	His	Asn	Asp
His 465	Pro	Asn	Asn	Phe	Ser 470	Arg	Ser	Pro	Pro	Tyr 475	Thr	Asp	Asp	Val	Lys 480
Trp	Leu	Leu	Gly	Leu 485	Ala	Ala	Lys	Leu	Gly 490	Val	Asn	Tyr	Val	His 495	Gln
Phe	Cys	Val	Gly 500	Ala	Ala	Lys	Gly	Val 505	Leu	Ser	Pro	Phe	Val 510	Leu	Gln
Glu	Ile	Val 515	Met	Glu	Thr	Leu	Gln 520	Arg	Leu	Ser	Pro	Ala 525	His	Ala	His
Asn	His 530	Leu	Arg	Ala	Pro	Ala 535	Phe	His	Gln	Leu	Val 540	Gln	Arg	Cys	Gln
Gln 545	Ala	Ťyr	Met	Gln	Tyr 550	Ile	His	His	Arg	Leu 555	Ile	His	Leu	Thr	Pro 560
Ala	Asp	Tyr	Asp	Asp	Phe	Val	Asn	Ala	Ile	Arg	Ser	Ala	Arg	Ser	Ala

565 570 575

Phe Cys Leu Thr Pro Met Gly Met Met Gln Phe Asn Asp Ile Leu Gln 580 585 590

Asn Leu Lys Arg Ser Lys Gln Thr Lys Glu Leu Trp Gln Arg Val Ser 595 600 605

Leu Glu Met Ala Thr Phe Ser Pro 610 615

<210> 1520

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1520

Glu Gly Ser Arg Pro Pro Leu Cys Arg Ser Cys Ile Ser Ala Glu Ser 1 5 10 15

Val Phe Gln Pro Gln Leu Val Ala Pro Leu Ala Pro Leu Leu Pro Asp 20 25 30

Gly His Val Phe Val Thr Leu Glu Asn Lys Gln Pro His Thr His Phe
35 40 45

Phe Phe Ser Phe Lys Thr Val Thr Trp Lys Tyr Glu Lys Ala Arg Arg
50 55 60

Arg Ser Lys Gly Cys Phe Leu Glu Trp Leu Arg Cys Cys Pro Ala Val 65 70 . 75 80

Val Ile Val Phe Ser Thr Gly Leu Phe Pro Phe Ile Ser Cys Gly Thr 85 90 95

Glu Ser Leu Leu Pro Pro Leu Leu Gly Ser Pro Gly Gly Pro Trp Pro 100 105 110

Pro Phe Arg Leu Ser Lys Lys Pro Thr Thr Leu Glu Ile Phe Phe Leu 115 120 125

Glu Phe Arg Cys Phe Leu Leu Leu Pro Leu Asp Lys Lys Gln Leu Lys 130 135 140

Arg Pro Tyr Leu Arg Asp Glu Lys Asn Met His Ile Asn Ser Ile 145 \$150\$

```
<210> 1521
<211> 129
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1521
Glu Trp Ala Glu Cys Arg Gly Gln Leu Val Gln Xaa Ser Arg Pro Glu
                                     10
Val Ser Ala Gly Ser Leu Leu Pro Ala Pro Gln Ala Glu Asp His
Ser Ser Arg Ile Leu Tyr Pro Arg Pro Lys Ser Leu Leu Pro Lys Met
Met Asn Ala Asp Met Asp Ala Val Asp Ala Glu Asn Gln Val Glu Leu
                         55
Glu Glu Lys Thr Arg Leu Ile Asn Gln Val Leu Glu Leu Gln His Thr
                    70
                                       75
Leu Glu Asp Leu Ser Ala Arg Val Asp Ala Val Lys Glu Glu Asn Leu
                85
                                    90
Lys Leu Lys Ser Glu Asn Gln Val Leu Gly Gln Tyr Ile Glu Asn Leu
                               105
Met Ser Ala Ser Ser Val Phe Gln Thr Thr Asp Thr Lys Ser Lys Arg
                           120
Lys
<210> 1522
<211> 109
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (58)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (80) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1522 Ala Gly Thr Glu Pro Gly Val Lys Cys Ser Ala Lys Val His Asp Pro 10 Leu Arg Ser His Trp Ala Asp Leu Thr Ser Asp Ser Leu Val Val Gln Met Pro Cys Ala Ala Phe Pro Glu Ala Ile Gly Gly Leu Pro Ala Ala 40 Glu Ile Tyr Ala Gly His Pro Leu Asn Xaa Cys His Ser Lys Gly Gly 50

Pro Arg Cys Ser Ser Xaa Ser Phe Thr Cys Gly Gly Val Gly Glu Xaa

Ala Val Ser Glu Met Gln Val Pro Arg Ser His Pro Gly Leu Leu Lys 90

Gly Cys Gly Ile Cys Val Ser Asp Ala Tyr Tyr Asn Met 105 100

<210> 1523

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1523

Gly Thr Ser Ser Cys Leu Ser Leu Pro Glu Tyr Trp Asp Tyr Arg Leu 5

Phe Leu Phe Lys His Lys Ser Phe Lys Leu Val Leu Thr Leu Tyr Ser 20

Ala Leu Asp Cys Phe Ser Phe Cys Ser Val Ile Met Ser Leu Val Gly 40

Asp Ile Leu His Arg

50

```
<210> 1524
<211> 111
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
Ile Leu Asn Val Lys Ile Ile Asp Leu Asp Ile Glu Ser Ile Ser Asp
                                     10
Ser Arg Asp Thr Pro Ile Cys Leu Lys Gln Pro Lys Met Tyr Trp Leu
                               25
Trp Asn His Val Leu Asp Arg Phe Leu Arg Pro Val Ser Ser Asn Leu
        35
                            40
                                                 45
Asp Thr Val Phe Lys Gly Gly Leu Leu Thr Cys Thr Val Gly Gln Ile
                         55
Ile Gln Ile Tyr Leu Arg Leu Gly Lys Lys Val Ile Cys Asp Phe Ala
Gly Arg Ala Phe Ala Lys Trp Ser Thr Gly Ser Lys Arg Val Phe Leu
                85
Glu Arg Ala Ile Leu Ser Asn Glu Val Ser Xaa Arg Thr Leu Gly
            100
                                105
<210> 1525
<211> 253
<212> PRT
<213> Homo sapiens
<400> 1525
Leu Ser Gln Arg Gln Asp Gln Val Pro Arg Leu Pro Val Gln Lys Ser
```

Arg Gln Glu Ser Pro Arg Ala Glu Glu Asn Pro Lys Trp Arg Glu Gly
20 25 30

Lys Lys Glu Thr Ser Glu Ser Ser Val Gln Lys Ala Gly Arg Ala Ala

45

40

35

Ala Ala Gln Ala Gly Ala Ala Ala Ser Arg Val Pro Gly Leu Ser Gly
50 55 60

Ser Asn Leu Ala Pro Cys Asn Lys Gly Arg Leu Ser Ala Arg Glu Asp 65 70 75 80

Val Ser Asn Ser Lys Met Gln Ala Gln Gln Tyr Gln Gln Gln Arg Arg 85 90 95

Lys Phe Ala Ala Ala Phe Leu Ala Phe Ile Phe Ile Leu Ala Ala Val 100 105 110

Asp Thr Ala Glu Ala Gly Lys Lys Glu Lys Pro Glu Lys Lys Val Lys
115 120 125

Lys Ser Asp Cys Gly Glu Trp Gln Trp Ser Val Cys Val Pro Thr Ser 130 135 140

Gly Asp Cys Gly Leu Gly Thr Arg Glu Gly Thr Arg Thr Gly Ala Glu 145 150 155 160

Cys Lys Gln Thr Met Lys Thr Gln Arg Cys Lys Ile Pro Cys Asn Trp 165 170 175

Lys Lys Gln Phe Gly Ala Glu Cys Lys Tyr Gln Phe Gln Ala Trp Gly 180 185 190

Glu Cys Asp Leu Asn Thr Ala Leu Lys Thr Arg Thr Gly Ser Leu Lys
195 200 205

Arg Ala Leu His Asn Ala Glu Cys Gln Lys Thr Val Thr Ile Ser Lys 210 215 220

Pro Cys Gly Lys Leu Thr Lys Pro Lys Pro Gln Ala Glu Ser Lys Lys 225 230 235 240

Lys Lys Glu Gly Lys Lys Gln Glu Lys Met Leu Asp 245 250

<210> 1526

<211>-93

<212> PRT

<213> Homo sapiens

<400> 1526

Pro Cys Thr Lys Arg Asn Gly Asp Cys Leu Tyr Pro Pro Arg Phe Ile 1 5 10 15

Ser Trp Pro Glu Val Ile Leu Ala Ser Arg Lys Gly Cys Thr Ser Ser

20

25

1354

30

His His Gln Leu Gln Arg Met Ala Ala Ile Tyr Leu Ser Arg Gly Phe 35 40 45

Phe Ser Arg Glu Pro Ile Cys Pro Phe Glu Glu Lys Thr Lys Val Glu 50 55 60

Arg Met Val Glu Asp Tyr Leu Ala Ser Gly Tyr Gln Val Ser Arg Lys
65 70 75 80

Arg Thr Val Val Lys Asn Asp Met Leu Ser Ser Asn Arg

<210> 1527

<211> 276

<212> PRT

<213> Homo sapiens

<400> 1527

Phe Phe Ile Asp His Asn Thr Lys Thr Thr Trp Glu Asp Pro Arg
1 5 10 15

Leu Lys Phe Pro Val His Met Arg Ser Lys Thr Ser Leu Asn Pro Asn 20 25 30

Asp Leu Gly Pro Leu Pro Pro Gly Trp Glu Glu Arg Ile His Leu Asp 35 40

Gly Arg Thr Phe Tyr Ile Asp His Asn Ser Lys Ile Thr Gln Trp Glu 50 60

Asp Pro Arg Leu Gln Asn Pro Ala Ile Thr Gly Pro Ala Val Pro Tyr 65 70 75 80

Ser Arg Glu Phe Lys Gln Lys Tyr Asp Tyr Phe Arg Lys Lys Leu Lys 85 90 95

Lys Pro Ala Asp Ile Pro Asn Arg Phe Glu Met Lys Leu His Arg Asn 100 105 110

Asn Ile Phe Glu Glu Ser Tyr Arg Arg Ile Met Ser Val Lys Arg Pro 115 120 125

Asp Val Leu Lys Ala Arg Leu Trp Ile Glu Phe Glu Ser Glu Lys Gly 130 135 140

Leu Asp Tyr Gly Gly Val Ala Arg Glu Trp Phe Phe Leu Leu Ser Lys 145 150 155 160

Glu Met Phe Asn Pro Tyr Tyr Gly Leu Phe Glu Tyr Ser Ala Thr Asp 165 170 175

Asn Tyr Thr Leu Gln Ile Asn Pro Asn Ser Gly Leu Cys Asn Glu Asp 180 185 190

His Leu Ser Tyr Phe Thr Phe Ile Gly Arg Val Ala Gly Leu Ala Val 195 200 205

Phe His Gly Lys Leu Leu Asp Gly Phe Phe Ile Arg Pro Phe Tyr Lys 210 215 220

Met Met Leu Gly Lys Gln Ile Thr Leu Asn Asp Met Glu Ser Val Asp 225 230 235 240

Ser Glu Tyr Tyr Asn Ser Leu Lys Trp Ile Leu Glu Asn Asp Pro Thr 245 250 255

Glu Leu Asp Leu Met Phe Cys Ile Asp Glu Glu Asn Phe Gly Gln Thr 260 265 270

Ser Thr Gly Arg 275

<210> 1528

<211> 307

<212> PRT

<213> Homo sapiens

<400> 1528

Val Met Asp Leu Val Leu Arg Val Ala Asp Tyr Tyr Phe Phe Thr Pro 1 5 10 15

Tyr Val Tyr Pro Ala Thr Trp Pro Glu Asp Asp Ile Phe Arg Gln Ala
20 25 30

Ile Ser Leu Leu Ile Val Thr Asn Val Gly Ala Tyr Ile Leu Tyr Phe 35 40 45

Phe Cys Ala Thr Leu Ser Tyr Tyr Phe Val Phe Asp His Ala Leu Met 50 55 60

Lys His Pro Gln Phe Leu Lys Asn Gln Val Arg Arg Glu Ile Lys Phe 65 70 75 80

Thr Val Gln Ala Leu Pro Trp Ile Ser Ile Leu Thr Val Ala Leu Phe 85 90 95

Leu Leu Glu Ile Arg Gly Tyr Ser Lys Leu His Asp Asp Leu Gly Glu 100 105 110

Phe Pro Tyr Gly Leu Phe Glu Leu Val Val Ser Ile Ile Ser Phe Leu 115 120 125

Phe Phe Thr Asp Met Phe Ile Tyr Trp Ile His Arg Gly Leu His His 130 135 140

Arg Leu Val Tyr Lys Arg Leu His Lys Pro His His Ile Trp Lys Ile 145 150 155 160

Pro Thr Pro Phe Ala Ser His Ala Phe His Pro Ile Asp Gly Phe Leu 165 170 175

Gln Ser Leu Pro Tyr His Ile Tyr Pro Phe Ile Phe Pro Leu His Lys 180 185 190

Val Val Tyr Leu Ser Leu Tyr Ile Leu Val Asn Ile Trp Thr Ile Ser 195 200 205

Ile His Asp Gly Asp Phe Arg Val Pro Gln Ile Leu Gln Pro Phe Ile 210 215 220

Asn Gly Ser Ala His His Thr Asp His His Met Phe Phe Asp Tyr Asn 225 230 235 240

Tyr Gly Gln Tyr Phe Thr Leu Trp Asp Arg Ile Gly Gly Ser Phe Lys 245 250 255

Asn Pro Ser Ser Phe Glu Gly Lys Gly Pro Leu Ser Tyr Val Lys Glu 260 265 270

Met Thr Glu Gly Lys Arg Thr Ala Ile Gln Glu Met Ala Val Arg Met 275 280 285

Lys Asn Tyr Ser Met Glu Ser Leu Gln Arg Leu Asn Arg Leu Leu Pro 290 295 300

Ser Tyr Ser 305

<210> 1529

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1529

Thr Pro Tyr Ala Ser Leu Pro Met Gln Thr Ile Gln Glu Asn Lys Pro

15 10 Ala Thr Phe Ser Ser Met Ser His Tyr Gly Asn Gln Thr Leu Gln Asp Leu Leu Thr Ser Asp Ser Leu Ser His Ser Asp Val Met Met Thr Gln 40 Ser Asp Pro Leu Met Ser Gln Ala Ser Thr Ala Val Ser Ala Gln Asn 55 Ser Arg Arg Asn Val Met Leu Arg Asn Asp Pro Met Met Ser Phe Ala Ala Gln Pro Asn Gln Gly Ser Leu Val Asn Gln Asn Leu Leu His His Gln His Gln Thr Gln Gly Ala Leu Gly Gly Ser Arg Ala Leu Ser Asn 100 105 Ser Val Ser Asn Met Gly Leu Ser Glu Ser Ser Ser Leu Gly Ser Ala 120 Lys His Gln Gln Ser Pro Val Ser Gln Ser Met Gln Thr Leu Ser 135 Asp Ser Leu Ser Gly Ser Ser Leu Tyr Ser Thr Ser Ala Asn Leu Pro 150 155 Val Met Gly His Glu Lys Phe Pro Ser Asp Leu Asp Leu Asp Met Phe 170 Asn Gly Ser Leu Glu Cys Asp Met Glu Ser Ile Ile Arg Ser Glu Leu 185 Met Asp Ala Asp Gly Leu Asp Phe Asn Phe Asp Ser Leu Ile Ser Thr Gln Asn Val Val Gly Leu Asn Val Gly Asn Phe Thr Gly Ala Lys Gln Ala Ser Ser Gln Ser Trp Val Pro Gly 225 230

<210> 1530

<211> 363

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (178) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (179) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1530 Ala His Arg Leu Leu Val His Arg Asp Val Cys His His Val Ser Ser 10 Glu Val Gln Phe Gly His Ala Gly Ala Cys Ala Asn Gln Ala Ser Glu 20 25 Thr Ala Val Ala Lys Asn Gln Ala Leu Lys Glu Ala Gly Val Phe Val 40 35 Pro Arg Ser Phe Asp Glu Leu Gly Glu Ile Ile Gln Ser Val Tyr Glu Asp Leu Val Ala Asn Gly Val Ile Val Pro Ala Gln Glu Val Pro Pro 70 75 Pro Thr Val Pro Met Asp Tyr Ser Trp Ala Arg Glu Leu Gly Leu Ile 90 85 Arg Lys Pro Ala Ser Phe Met Thr Ser Ile Cys Asp Glu Arg Gly Gln 105 Glu Leu Ile Tyr Ala Gly Met Pro Ile Thr Glu Val Phe Lys Glu Glu 115 120 Met Gly Ile Gly Gly Val Leu Gly Leu Leu Trp Phe Gln Lys Arg Leu 130 135 Pro Lys Tyr Ser Cys Gln Phe Ile Glu Met Cys Leu Met Val Thr Ala 150 155 Asp His Gly Pro Ala Val Ser Gly Ala His Asn Thr Ile Ile Cys Ala 170 165 175 Arg Xaa Xaa Lys Asp Leu Val Ser Ser Leu Thr Ser Gly Leu Leu Thr 180

Ser Lys Ala Phe Asp Ser Gly Ile Ile Pro Met Glu Phe Val Asn Lys

Ile Gly Asp Arg Phe Gly Gly Ala Leu Asp Ala Ala Ala Lys Met Phe 195 200 205

210 215 220 Met Lys Lys Glu Gly Lys Leu Ile Met Gly Ile Gly His Arg Val Lys Ser Ile Asn Asn Pro Asp Met Arg Val Gln Ile Leu Lys Asp Tyr Val 245 250 Arg Gln His Phe Pro Ala Thr Pro Leu Leu Asp Tyr Ala Leu Glu Val 260 265 Glu Lys Ile Thr Thr Ser Lys Lys Pro Asn Leu Ile Leu Asn Val Asp 280 Gly Leu Ile Gly Val Ala Phe Val Asp Met Leu Arg Asn Cys Gly Ser 295 Phe Thr Arg Glu Glu Ala Asp Glu Tyr Ile Asp Ile Gly Ala Leu Asn 310 315 Gly Ile Phe Val Leu Gly Arg Ser Met Gly Phe Ile Gly His Tyr Leu Asp Gln Lys Arg Leu Lys Gln Gly Leu Tyr Arg His Pro Trp Asp Asp 345 Ile Ser Tyr Val Leu Pro Glu His Met Ser Met 355 360 <210> 1531 <211> 397 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (179) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (180) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (181)

<220> <221> SITE <222> (358) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1531 Ser Val Ser Ala Ser Glu Val Thr Ser Thr Val Tyr Asn Thr Val Ser 10 Glu Gly Thr His Phe Leu Glu Thr Ile Glu Thr Pro Arg Pro Gly Lys 25 Leu Phe Pro Lys Asp Val Ser Ser Ser Thr Pro Pro Ser Val Thr Ser 35 40 Lys Ser Arg Val Ser Arg Leu Ala Gly Arg Lys Thr Asn Glu Ser Val Ser Glu Pro Arg Lys Gly Phe Met Tyr Ser Arg Asn Thr Asn Glu Asn Pro Gln Glu Cys Phe Asn Ala Ser Lys Leu Leu Thr Ser His Gly Met 85 90 Gly Ile Gln Val Pro Leu Asn Ala Thr Glu Phe Asn Tyr Leu Cys Pro 100 105 Ala Ile Ile Asn Gln Ile Asp Ala Arg Ser Cys Leu Ile His Thr Ser 120 Glu Lys Lys Ala Glu Ile Pro Pro Lys Thr Tyr Ser Leu Gln Ile Ala 130 135 140 Trp Val Gly Gly Phe Ile Ala Ile Ser Ile Ile Ser Phe Leu Ser Leu 145 150 155 Leu Gly Val Ile Leu Val Pro Leu Met Asn Arg Val Phe Phe Lys Phe 165 170 Leu Leu Xaa Xaa Xaa Val Ala Leu Ala Val Gly Thr Leu Ser Gly Asp 180 Ala Phe Leu His Leu Leu Pro His Ser His Ala Ser His His His Ser 195 200 His Ser His Glu Glu Pro Ala Met Glu Met Lys Arg Gly Pro Leu Phe 215 Ser His Leu Ser Ser Gln Asn Ile Glu Glu Ser Ala Tyr Phe Asp Ser 225 230

Thr Trp Lys Gly Leu Thr Ala Leu Gly Gly Leu Tyr Phe Met Phe Leu 245 250 255

Val Glu His Val Leu Thr Leu Ile Lys Gln Phe Lys Asp Lys Lys 260 265 270

Lys Asn Gln Lys Lys Pro Glu Asn Asp Asp Asp Val Glu Ile Lys Lys 275 280 285

Gln Leu Ser Lys Tyr Glu Ser Gln Leu Ser Thr Asn Glu Glu Lys Val 290 295 300

Asp Thr Asp Asp Arg Thr Glu Gly Tyr Leu Arg Ala Asp Ser Gln Glu 305 310 315 320

Pro Ser His Phe Asp Ser Gln Gln Pro Ala Val Leu Glu Glu Glu Glu 325 330 335

Val Met Ile Ala His Ala His Pro Gln Glu Val Tyr Asn Glu Tyr Val 340 345 350

Pro Arg Gly Cys Lys Xaa Lys Cys His Ser His Phe His Asp Thr Leu 355 360 365

Gly Gln Ser Asp Asp Leu Ile His His His His Asp Phe Phe Lys Lys 370 375 380

Lys Lys Lys Lys Lys Ile Lys Lys Lys Gln Lys Lys 385 390 395

<210> 1532

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1532

Val Trp His Phe Ile Leu Phe Leu Cys Cys Trp Leu Cys Ile Leu Glu
1 5 10 15

Gly Lys Lys Leu Leu Lys Gln Thr Ser Gln Phe Phe Leu Phe Ser 20 25 30

Asn Tyr Pro Val Gly Asn Ser Gln Tyr Gly Gln Gln Gln Asp Ala Tyr 35 40 45

Gln Gly Pro Pro Pro Gln Gln Gly Tyr Pro Pro Gln Gln Gln Gln Tyr
50 55 60

Pro Gly Gln Gln Gly Tyr Pro Gly Gln Gln Gly Tyr Gly Pro Ser

70 75 80 65 Gln Gly Gly Pro Gly Pro Gln Tyr Pro Asn Tyr Pro Gln Gly Gln Gly 90 85 Gln Gln Tyr Gly Gly Tyr Arg Pro Thr Gln Pro Gly Pro Pro Gln Pro 105 Pro Gln Gln Arg Pro Tyr Gly Tyr Asp Gln Gly Gln Tyr Gly Asn Tyr 120 Gln Gln 130 <210> 1533 <211> 53 <212> PRT <213> Homo sapiens <400> 1533 Ala Ile Leu Asp Leu Tyr Asn Pro Leu Asp Ala Ser Ala Tyr Arg Phe 10 5 Lys Met His Pro Val Val Phe Val Ala Phe Ser Ile Leu Ser Phe Leu 25 Met Cys Pro Ile Asn Lys Gln Phe Tyr Leu Lys Phe Lys Lys Lys 40 Lys Lys Lys Arg 50 <210> 1534 <211> 93 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (81)

Arg Asp Pro Arg Gly Pro Pro Leu Pro Leu Ser Phe Ser Ser Ala Pro 20 25 30

Thr Asp Thr Phe His Ser Glu Val Ser Pro Ser Pro Leu Leu Lys Ser 35 40 45

Pro Arg Ser Pro Leu His Pro Glu Val Ser Leu Tyr Arg Asp Pro Pro 50 55 60

Ser Phe His Pro Glu Asp Arg Pro Asn Pro Arg Ser Pro Pro Leu Ser 65 70 75 80

Xaa Ser Glu Arg Ala Ser Phe Gly Pro Lys Gln Pro Gly 85 90

<210> 1535

<211> 150

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1535

Pro Glu Ser Leu Gly Gly Ser Pro Gly Pro Pro Arg Pro Arg Gln Ser 1 5 10 15

Cys Ser Glu Thr Ser Val Val Leu Lys Cys His Ser Pro Arg Pro Gly 20 25 30

Arg His Arg Ser Pro Glu Ser Trp Ala Leu Gly Thr Leu Glu Ala Ala 35 40 45

Ala Pro Gly Thr Arg Gly Arg Pro Gly Ala Gly Glu Leu Arg Cys Trp 50 55 60

Glu Arg Ala Val Phe Ala Asp Ser Gly Gly Xaa Gly Gly Ser Arg Pro 65 70 75 80

Gly Ser Xaa Pro Gly Met Thr Met Leu Met Glu Leu Met Gly Gln Glu 85 90 95

Trp Glu Arg Arg Ser Ala Ala Phe Cys Xaa Cys Ala Ser Ile Ala Lys 100 105 110

Phe His Ser Pro Ser Ser Ala Ala Leu Leu Leu Ala Cys Gly Ser Pro 115 120 125

Arg Tyr Asn Phe Trp Ser Cys Leu Phe Leu Leu Met Ser Phe Thr Val 130 135 140

Asn Lys Phe Asp Cys His 145 150

<210> 1536

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1536

Leu Thr Tyr Ser Lys Asn Ala Pro Ile Leu Ser Asn Ser Met Pro Phe
1 5 10 15

Asp Lys Cys Ser Val Pro Met Pro Arg Pro Pro Gln Ser Arg Glu Asn 20 25 30

Ile Phe Ile Thr Pro Glu Gly Leu Leu Cys Ser Glu Tyr Ser Leu Gly 35 40 45

Val Pro Ala Ala Gly Asp Ile Asp Leu Phe Ser Val Thr Val Asp Glu 50 55 60

Ile Cys Leu Leu Tyr Thr Ile Phe Lys Asn 65 70

<210> 1537

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1537 Gly Thr Ser Arg Pro Val Ala Pro Glu Cys Thr Glu Asp Gly Gly Cys 10 Cys Arg Thr Val Ala Pro Ser Val Gly Ser Ser Cys His Ala Pro Ala Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val 55 60 Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile 70 Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile 100 105 Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu 120 Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu 135 Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn 145 Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser 165 170 Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr 185 His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile 195 200 Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln 210 215 220

<210> 1538 <211> 524

<212> PRT

<213> Homo sapiens

<400> 1538

Ser Ile Met Asn Ile Asn Asp Leu Lys Leu Thr Leu Ser Lys Ala Gly
1 5 10 15

Gln Glu His Leu Leu Arg Phe Trp Asn Glu Leu Glu Glu Ala Gln Gln 20 25 30

Val Glu Leu Tyr Ala Glu Leu Gln Ala Met Asn Phe Glu Glu Leu Asn
35 40 45

Phe Phe Gln Lys Ala Ile Glu Gly Phe Asn Gln Ser Ser His Gln 50 55 60

Lys Asn Val Asp Ala Arg Met Glu Pro Val Pro Arg Glu Val Leu Gly 65 70 75 80

Ser Ala Thr Arg Asp Gln Asp Gln Leu Gln Ala Trp Glu Ser Glu Gly
85 90 95

Leu Phe Gln Ile Ser Gln Asn Lys Val Ala Val Leu Leu Leu Ala Gly
100 105 110

Gly Gln Gly Thr Arg Leu Gly Val Ala Tyr Pro Lys Gly Met Tyr Asp 115 120 125

Val Gly Leu Pro Ser Arg Lys Thr Leu Phe Gln Ile Gln Ala Glu Arg 130 135 140

Ile Leu Lys Leu Gln Gln Val Ala Glu Lys Tyr Tyr Gly Asn Lys Cys 145 150 155 160

Ile Ile Pro Trp Tyr Ile Met Thr Ser Gly Arg Thr Met Glu Ser Thr
165 170 175

Lys Glu Phe Phe Thr Lys His Lys Tyr Phe Gly Leu Lys Lys Glu Asn 180 185 190

Val Ile Phe Phe Gln Gln Gly Met Leu Pro Ala Met Ser Phe Asp Gly
195 200 205

Lys Ile Ile Leu Glu Glu Lys Asn Lys Val Ser Met Ala Pro Asp Gly 210 215 220

Asn Gly Gly Leu Tyr Arg Ala Leu Ala Ala Gln Asn Ile Val Glu Asp 225 230 235 240

Met Glu Gln Arg Gly Ile Trp Ser Ile His Val Tyr Cys Val Asp Asn 245 250 255

Ile Leu Val Lys Val Ala Asp Pro Arg Phe Ile Gly Phe Cys Ile Gln Lys Gly Ala Asp Cys Gly Ala Lys Val Val Glu Lys Thr Asn Pro Thr 280 Glu Pro Val Gly Val Val Cys Arg Val Asp Gly Val Tyr Gln Val Val 295 Glu Tyr Ser Glu Ile Ser Leu Ala Thr Ala Gln Lys Arg Ser Ser Asp 310 315 Gly Arg Leu Leu Phe Asn Ala Gly Asn Ile Ala Asn His Phe Phe Thr 325 330 Val Pro Phe Leu Arg Asp Val Val Asn Val Tyr Glu Pro Gln Leu Gln 340 345 His His Val Ala Gln Lys Lys Ile Pro Tyr Val Asp Thr Gln Gly Gln 360 Leu Ile Lys Pro Asp Lys Pro Asn Gly Ile Lys Met Glu Lys Phe Val 375 Phe Asp Ile Phe Gln Phe Ala Lys Lys Phe Val Val Tyr Glu Val Leu 390 395 Arg Glu Asp Glu Phe Ser Pro Leu Lys Asn Ala Asp Ser Gln Asn Gly 405 410 Lys Asp Asn Pro Thr Thr Ala Arg His Ala Leu Met Ser Leu His His 425 Cys Trp Val Leu Asn Ala Gly Gly His Phe Ile Asp Glu Asn Gly Ser 435 440 Arg Leu Pro Ala Ile Pro Arg Ser Ala Thr Asn Gly Lys Ser Glu Thr 455 Ile Thr Ala Asp Val Asn His Asn Leu Lys Asp Ala Asn Asp Val Pro 465 470 475 Ile Gln Cys Glu Ile Ser Pro Leu Ile Ser Tyr Ala Gly Glu Gly Leu 485 Glu Ser Tyr Val Ala Asp Lys Glu Phe His Ala Pro Leu Ile Ile Asp 505

Glu Asn Gly Val His Glu Leu Val Lys Asn Gly Ile

520

515

<210> 1539 <211> 336 <212> PRT <213> Homo sapiens <400> 1539 His Phe Ile Phe Leu Leu Lys Asn Phe Gln Gln Ser Ser Asn Asp Thr Phe Pro Thr Ala Met His Ile Ala Ala Ile Glu Val His Glu Val Leu Leu Pro Gly Leu Gln Lys Leu His Asp Ala Leu Asp Ala Lys Ser 40 Lys Glu Phe Ala Gln Ile Ile Lys Ile Gly Arg Thr His Thr Gln Asp 55 Ala Val Pro Leu Thr Leu Gly Gln Glu Phe Ser Gly Tyr Val Gln Gln Val Lys Tyr Ala Met Thr Arg Ile Lys Ala Ala Met Pro Arg Ile Tyr 90 Glu Leu Ala Ala Gly Gly Thr Ala Val Gly Thr Gly Leu Asn Thr Arg 100 105 Ile Gly Phe Ala Glu Lys Val Ala Ala Lys Val Ala Ala Leu Thr Gly 120 Leu Pro Phe Val Thr Ala Pro Asn Lys Phe Glu Ala Leu Ala Ala His 135 Asp Ala Leu Val Glu Leu Ser Gly Ala Met Asn Thr Thr Ala Cys Ser 145 150 Leu Met Lys Ile Ala Asn Asp Ile Arg Phe Leu Gly Ser Gly Pro Arg 165 170 Ser Gly Leu Gly Glu Leu Ile Leu Pro Glu Asn Glu Pro Gly Ser Ser 180 190 Ile Met Pro Gly Lys Val Asn Pro Thr Gln Cys Glu Ala Met Thr Met 195

Val Ala Ala Gln Val Met Gly Asn His Val Ala Val Thr Val Gly Gly

Ser Asn Gly His Phe Glu Leu Asn Val Phe Lys Pro Met Met Ile Lys

215

210

225					230					235					240
Asn	Val	Leu	His	Ser 245	Ala	Arg	Leu	Leu	Gly 250	Asp	Ala	Ser	Val	Ser 255	Phe
Thr	Glu	Asn	Cys 260	Val	Val	Gly	Ile	Gln 265	Ala	Asn	Thr	Glu	Arg 270	Ile	Asn
Lys	Leu	Met 275	Asn	Glu	Ser	Leu	Met 280	Leu	Val	Thr	Ala	Leu 285	Asn	Pro	His
Ile	Gly 290	Tyr	Asp	Lys	Ala	Ala 295	Lys	Ile	Ala	Lys	Thr 300	Ala	His	Lys	Asn
Gly 305	Ser	Thr	Leu	Lys	Glu 310	Thr	Ala	Ile	Glu	Leu 315	Gly	Tyr	Leu	Thr	Ala 320
Glu	Gln	Phe	Asp	Glu 325	Trp	Val	Lys	Pro	Lys 330	Asp	Met	Leu	Gly	Pro 335	Lys

<211> 126 <212> PRT <213> Homo sapiens <400> 1540 Gly Val Val Lys Ser Leu Leu Phe Thr Arg Cys Asn Val Leu Val Pro 10 Tyr Lys Gln Gly Trp Gly Gly Glu Gly Arg Ala Lys Thr Asn Ile Glu 25 Ile Leu Lys Gln Gln Gln Ser Glu Trp Ile Leu Phe Phe Val Ile Val 35 40 Gly Gly Leu Lys Asn Ser Pro His Val Ile Ile Val Asn Thr Leu Leu Cys Gly His Cys Asn Ile Trp Gly Val Gly Gln Gly Gly Lys Val Thr 70 75 Ile Val His Met Ser Leu Ala Ser Val Gln Ser Ser Val Gln Asn Val Met Leu Phe Cys Lys Lys Arg Phe Met Ile Phe Lys Ile Asn Leu Val 100 105

<210> 1540

Asn Leu Phe Leu Val Val Ile Phe Phe Leu Arg Gln Ser Phe 115 120 125

<210> 1541

<211> 50

<212> PRT

<213> Homo sapiens

<400> 1541

Asn Ser Ala Arg Val Cys Ile Leu Ser Arg Asp Arg Val Ser Pro Cys

1 10 15

Trp Leu Gly Trp Cys Leu Ser Leu Asp Leu Val Ile His Pro Pro Gln
20 25 30

Pro Pro Arg Val Leu Gly Leu Gln Val Arg Ala Thr Ala Pro Gly Trp 35 40 45

Phe Ser 50

<210> 1542

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1542

Asp Phe Phe Leu Asn Ile Ser Glu Phe Glu Gly Asn Thr Asp Arg Phe 1 5 10 15

Leu Pro Ser Ser Leu Pro Ile Thr His Leu Ser Asp Asn Thr Leu Leu 20 25 30

Ile Glu Glu Val Ile Arg Ile Ile Phe Lys Phe Gln Ile 35 40 45

<210> 1543

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1543

Ile Ala Leu Pro Pro Ser Phe Gln Pro Gln Ser Asp Gly Arg Gly Asp
1 5 10 15

Ala Ser Gly Arg Asn Ala Ala Met Ala Ala Gln Gly Glu Pro Gln Val
20 25 30

Gln Phe Lys Leu Val Leu Val Gly Asp Gly Gly Thr Gly Lys Thr Thr

35 40 45

Phe Val Lys Arg His Leu Thr Gly Glu Phe Glu Lys Lys Tyr Val Ala 50 60

Thr Leu Gly Val Glu Val His Pro Leu Val Phe His Thr Asn Arg Gly 65 70 75 80

Pro Ile Lys Phe Asn Val Trp Asp Thr Ala Gly Gln Glu Lys Phe Gly 85 90 95

Gly Leu Arg Asp Gly Tyr Tyr Ile Gln Ala Gln Cys Ala Ile Ile Met 100 105 110

Phe Asp Val Thr Ser Arg Val Thr Tyr Lys Asn Val Pro Asn Trp His 115 120 125

Arg Asp Leu Val Arg Val Cys Glu Asn Ile Pro Ile Val Leu Cys Gly
130 135 140

Asn Lys Val Asp Ile Lys Asp Arg Lys Val Lys Ala Lys Ser Ile Val 145 150 155 160

Phe His Arg Lys Lys Asn Leu Gln Tyr Tyr Asp Ile Ser Ala Lys Ser 165 170 175

Asn Tyr Asn Phe Glu Lys Pro Phe Leu Trp Leu Ala Arg Lys Leu Ile 180 185 190

Gly Asp Pro Asn Leu Glu Phe Val Ala Met Pro Ala Leu Ala Pro Pro 195 200 205

Glu Val Val Met Asp Pro Ala Leu Ala Ala Gln Tyr Glu His Asp Leu 210 215 220

Glu Val Ala Gln Thr Thr Ala Leu Pro Asp Glu Asp Asp Asp Leu 225 230 235

<210> 1544

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1544

Val Val Thr Gly Ser Gly Ser Trp His Gln Val Ala Ser Ile Ile Arg

1 5 10 15

Ser Leu Thr Glu Asp Asn Met Gln Asn Ser His Met Asp Glu Tyr Arg 20 25 30

Asn Ser Ser Asn Gly Ser Thr Gly Asn Ser Ser Glu Val Val Glu
35 40 45

His Pro Thr Asp Phe Ser Thr Glu Ile Met Asn Val Thr Glu Met Glu 50 55 60

Gln Ser Pro Asp Asp Ser Pro Asn Val Asn Ala Ser Thr Glu Glu Thr
65 70 75 80

Glu Met Ala Ser Ala Val Asp Leu Pro Val Thr Leu Thr Glu Thr Glu 85 90 95

Ala Ile Ser Leu Gln Asn Met Lys Asn Phe Gly Lys Leu 100 105

<210> 1545

<211> 199

<212> PRT

<213> Homo sapiens

<400> 1545

Thr His Ala Ser Gly Pro Thr Arg Pro Gly Lys Met Ala Leu Ala Met
1 5 10 15

Leu Val Leu Val Val Ser Pro Trp Ser Ala Ala Arg Gly Val Leu Arg
20 25 30

Asn Tyr Trp Glu Arg Leu Leu Arg Lys Leu Pro Gln Ser Arg Pro Gly 35 40

Phe Pro Ser Pro Pro Trp Gly Pro Ala Leu Ala Val Gln Gly Pro Ala 50 55 60

Met Phe Thr Glu Pro Ala Asn Asp Thr Ser Gly Ser Lys Glu Asn Ser 65 70 75 80

Ser Leu Leu Asp Ser Ile Phe Trp Met Ala Ala Pro Lys Asn Arg Arg 85 90 95

Thr Ile Glu Val Asn Arg Cys Arg Arg Arg Asn Pro Gln Lys Leu Ile 100 105 110

Lys Val Lys Asn Asn Ile Asp Val Cys Pro Glu Cys Gly His Leu Lys

115 120 125

Gln Lys His Val Leu Cys Ala Tyr Cys Tyr Glu Lys Val Cys Lys Glu 130 135 140

Thr Ala Glu Ile Arg Arg Gln Ile Gly Lys Gln Glu Gly Gly Pro Phe 145 150 155 160

Lys Ala Pro Thr Ile Glu Thr Val Val Leu Tyr Thr Gly Glu Thr Pro 165 170 175

Ser Glu Gln Asp Gln Gly Lys Arg Ile Ile Glu Arg Asp Arg Lys Arg 180 185 190

Pro Ser Trp Phe Thr Gln Asn 195

<210> 1546

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1546

Pro Thr Arg Pro Pro Thr Arg Pro Arg Arg Trp Arg Arg Arg Thr Ala
1 5 10 15

Pro Glu Arg Ala Gly Ala Met Ser Ala Ala Arg Pro Gln Phe Ser Ile
20 25 30

Asp Asp Ala Phe Glu Leu Ser Leu Glu Asp Gly Gly Pro Glu 35 40 45

Ser Ser Gly Val Ala Arg Phe Gly Pro Leu His Phe Glu Arg Arg Ala 50 60

Arg Phe Glu Val Ala Asp Glu Asp Lys Gln Ser Arg Leu Arg Tyr Gln 65 70 75 80

Asn Leu Glu Asn Asp Glu Asp Gly Ala Gln Ala Ser Pro Glu Pro Asp
85 90 95

Gly Gly Val Gly Thr Arg Leu Gly Pro Gly Ile Pro Ala Glu Leu Pro 100 105 110

Pro Gly Leu Pro Val Leu Leu Pro Ala Leu Leu Arg Glu Val Ile Ala 115 120 125

Ala Gln Arg Gly Pro Leu Ala Pro Met Gly Ala Pro Leu Leu Pro Cys 130 135 140 Pro Ser Pro

<210> 1547

<211> 176

<212> PRT

<213> Homo sapiens

<400> 1547

Ser Thr His Ala Ser Ala His Ala Ser Gly Pro Val Pro Ser Ala Ala 1 5 10 15

Ser Ser Ala Gly Gly Ser Gly Gly Leu Ser Phe Arg Ala Ala Ser Ser 20 25 30

Leu Pro Val Ser Pro Ser Leu Ala Val Ser Met Lys Ala Phe Ser Pro 35 40 45

Val Arg Ser Val Arg Lys Asn Ser Leu Ser Asp His Ser Leu Gly Ile 50 60

Ser Arg Ser Lys Thr Pro Val Asp Asp Pro Met Ser Leu Leu Tyr Asn 65 70 75 80

Met Asn Asp Cys Tyr Ser Lys Leu Lys Glu Leu Val Pro Ser Ile Pro 85 90 95

Gln Asn Lys Lys Val Ser Lys Met Glu Ile Leu Gln His Val Ile Asp 100 105 110

Tyr Ile Leu Asp Leu Gln Ile Ala Leu Asp Ser His Pro Thr Ile Val

Ser Leu His His Gln Arg Pro Gly Gln Asn Gln Ala Ser Arg Thr Pro 130 135 140

Leu Thr Thr Leu Asn Thr Asp Ile Ser Ile Leu Ser Leu Gln Ala Ser 145 150 155 160

Glu Phe Pro Ser Glu Leu Met Ser Asn Asp Ser Lys Ala Leu Cys Gly
165 170 175

```
<210> 1548
<211> 69
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1548
Lys Lys Ser Leu Arg Cys Glu Tyr Arg Ile Asp Ile Glu Arg Leu Tyr
Met Ser Lys Thr His Leu Ser Ser Ser His Arg Pro Leu Gln Ser Gly
             20
                                 25
                                                     30
His Val Gly Gln Xaa Gly Thr Gly Ala Gly Asp Ala Pro Pro Gly Gln
                             40
Asn Ala Pro Phe Val Ala Leu Pro Asp Thr Xaa Tyr Leu Leu Xaa Lys
                         55
                                             60
Arg Glu Thr Gly Ser
65
<210> 1549
<211> 41
<212> PRT
<213> Homo sapiens
<400> 1549
Ile Leu Leu Tyr Lys His Phe His Ile Leu Pro Leu His Leu Thr Ile
                  5
                                     10
Gln His Lys Gln Leu Leu Met Ala Leu Arg Ile Val Cys Thr Cys Asn
             20
```

Phe Glu Trp Leu Tyr Ala Val Ser Ser 35 40

<210> 1550

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1550

Phe Phe Ala Pro Leu Lys Pro Val Arg Ile Thr Met Glu Tyr Ser Ser 1 5 10 15

Ser Gly Lys Ala Thr Gly Glu Ala Asp Val His Phe Glu Thr His Glu 20 25 30

Asp Ala Val Ala Ala Met Leu Lys Asp Arg Ser His Val His Arg 35 40 45

Tyr Ile Glu Leu Phe Leu Asn Ser Cys Pro Lys Gly Lys
50 55 60

<210> 1551

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1551

Gly Ser Leu Ala Ser Phe Leu Ala Cys Ser Ser Glu Phe Phe Gln Pro 1 5 10 15

Pro Pro Thr Ala Gln Phe Gln Ser His Phe Ser Thr Phe Arg Tyr Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Leu Gln Gln His Leu Lys Tyr Leu Glu Asn Ser Phe Met Pro Ala Ser
35 40 45

Leu Pro Asp Asp Leu Asn Met Val Leu Asp Leu Glu Phe Thr Phe Leu 50 55 60

Gln Gly His Cys Leu Phe Gln Arg Gly Glu Phe Thr Cys Ala Arg Val 65 70 75 80

Phe Thr Leu Gly Val Leu Pro Glu Leu Pro Gln Asp Glu Ser Gly Glu 85 90 95

Pro Thr Thr Ala Glu Lys Phe Ser Gln Cys Arg Asn Ile Glu Glu Phe

100 105 110

Ser Lys

```
<210> 1552
<211> 450
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (185)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (414)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (420)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (429)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (442)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1552
Thr Gly Cys Gly Lys Thr Thr Gln Val Thr Gln Phe Ile Leu Asp Asn
Tyr Ile Glu Arg Gly Lys Gly Ser Ala Cys Arg Ile Val Cys Thr Gln
             20
                                 25
                                                      30
```

Pro Arg Arg Ile Ser Ala Ile Ser Val Ala Glu Arg Val Ala Ala Glu

40

35

Arg	Ala 50	Glu	Ser	Cys	Gly	Ser 55	Gly	Asn	Ser	Thr	Gly 60	Tyr	Gln	Ile	Arg
Leu 65	Gln	Ser	Arg	Leu	Pro 70	Arg	Lys	Gln	Gly	Ser 75	Ile	Leu	Tyr	Cys	Thr 80
Thr	Gly	Ile	Ile	Leu 85	Gln	Trp	Leu	Gln	Ser 90	Asp	Pro	Tyr	Leu	Ser 95	Ser
Val	Ser	His	Ile 100	Val	Leu	Asp	Glu	Ile 105	His	Glu	Arg	Asn	Leu 110	Gln	Ser
Asp	Val	Leu 115	Met	Thr	Val	Val	Lys 120	Asp	Leu	Leu	Asn	Phe 125	Arg	Ser	Asp
Leu	Lys 130	Val	Ile	Leu	Met	Ser 135	Ala	Thr	Leu	Asn	Ala 140	Glu	Lys	Phe	Ser
Glu 145	Tyr	Phe	Gly	Asn	Cys 150	Pro	Met	Ile	His	Ile 155	Pro	Gly	Phe	Thr	Phe 160
Pro	Val	Val	Glu	Tyr 165	Leu	Leu	Glu	Asp	Val 170	Ile	Glu	Lys	Ile	Arg 175	Tyr
Val	Pro	Glu	Gln 180	Lys	Glu	His	Arg	Xaa 185	Gln	Phe	Lys	Arg	Gly 190	Phe	Met
Gln	Gly	His 195	Val	Asn	Arg	Gln	Xaa 200	Lys	Glu	Glu	Lys	Glu 205	Ala	Ile	Tyr
Lys	Glu 210	Arg	Trp	Pro	Asp	Tyr 215	Val	Arg	Glu	Leu	Arg 220	Arg	Arg	Tyr	Ser
Ala 225	Ser	Thr	Val	Asp	Val 230	Ile	Glu	Met	Met	Glu 235	Asp	Asp	Lys	Val	Asp 240
Leu	Asn	Leu	Ile	Val 245	Ala	Leu	Ile	Arg	Tyr 250	Ile	Val	Leu	Glu	Glu 255	Glu
Asp	Gly	Ala	11e 260	Leu	Val	Phe	Leu	Pro 265	Gly	Trp	Asp	Asn	11e 270	Ser	Thr
Leu	His	Asp 275	Leu	Leu	Met	Ser	Gln 280	Val	Met	Phe	Lys	Ser 285	Asp	Lys	Phe
Leu	Ile 290	Ile	Pro	Leu	His	Ser 295	Leu	Met	Pro	Thr	Val 300	Asn	Gln	Thr	Gln
Val 305	Phe	Lys	Arg	Thr	Pro 310	Pro	Gly	Val	Arg	Lys 315	Ile	Val	Ile	Ala	Thr 320

Asn Ile Ala Glu Thr Ser Ile Thr Ile Asp Asp Val Val Tyr Val Ile 325 330 Asp Gly Gly Lys Ile Lys Glu Thr His Phe Asp Thr Gln Asn Asn Ile 340 345 Ser Thr Met Ser Ala Glu Trp Val Ser Lys Ala Asn Ala Lys Gln Arg 360 Lys Gly Arg Ala Gly Arg Val Gln Pro Gly His Cys Tyr His Leu Tyr 375 Asn Gly Leu Arg Ala Ser Leu Leu Asp Asp Tyr Gln Leu Pro Glu Ile 385 390 395 Leu Arg Thr Pro Leu Glu Glu Leu Cys Leu Gln Ile Lys Xaa Phe Lys Ala Arg Trp Xaa Cys Leu Phe Leu Ser Arg Leu Met Xaa Pro Pro Ser 425 Asn Glu Ala Val Leu Leu Ser Ile Arg Xaa Leu Met Glu Leu Glu Arg 435 440 445 Phe Gly 450 <210> 1553 <211> 446 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (64) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1553

Glu 1	Leu	Leu	Ala	Val 5	Val	Gly	Pro	Val	Gly 10	Ala	Gly	Lys	Ser	Ser 15	Leu
Leu	Ser	Ala	Val 20	Leu	Gly	Glu	Leu	Ala 25	Pro	Ser	His	Gly	Leu 30	Val	Ser
Val	His	Gly 35	Arg	Ile	Ala	Tyr	Val 40	Ser	Gln	Gln	Pro	Trp 45	Val	Phe	Ser
Gly	Thr 50	Leu	Arg	Ser	Asn	Ile 55	Leu	Phe	Gly	Lys	Lys 60	Xaa	Glu	Lys	Xaa
Arg 65	Tyr	Glu	Lys	Val	Ile 70	Lys	Ala	Cys	Ala	Leu 75	Lys	Lys	Asp	Leu	Gln 80
Leu	Leu	Glu	Asp	Gly 85	Asp	Leu	Thr	Val	Ile 90	Gly	Asp	Arg	Gly	Thr 95	Thr
Leu	Ser	Xaa	Gly 100	Gln	Lys	Ala	Arg	Val 105	Asn	Leu	Ala	Arg	Ala 110	Val	Tyr
Gln	Asp	Ala 115	Asp	Ile	Tyr	Leu	Leu 120	Asp	Asp	Pro	Leu	Ser 125	Ala	Val	Asp
Ala	Glu 130	Val	Ser	Arg	His	Leu 135	Phe	Glu	Leu	Cys	Ile 140	Cys	Gln	Ile	Leu
His 145	Glu	Lys	Ile	Thr	Ile 150	Leu	Val	Thr	His	Gln 155	Leu	Gln	Tyr	Leu	Lys 160
Ala	Ala	Ser	Gln	Ile 165	Leu	Ile	Leu	Lys	Asp 170	Gly	Lys	Met	Val	Gln 175	Lys
Gly	Thr	Tyr	Thr 180	Glu	Phe	Leu	Lys	Ser 185	Gly	Ile	Asp	Phe	Gly 190	Ser	Leu
Leu	Lys	Lys 195	Asp	Asn	Glu	Glu	Ser 200	Glu	Gln	Pro	Pro	Val 205	Pro	Gly	Thr
Pro	Thr 210	Leu	Arg	Asn	Arg	Thr 215	Phe	Ser	Glu	Ser	Ser 220	Val	Trp	Ser	Gln
Gln 225	Ser	Ser	Arg	Pro	Ser 230	Leu	Lys	Asp	Gly	Ala 235	Leu	Glu	Ser	Gln	Asp 240
Thr	Glu	Asn	Val	Pro 245	Val	Thr	Leu	Ser	Glu 250	Glu	Asn	Arg	Ser	Glu 255	Gly
Lys	Val	Gly	Phe 260	Gln	Ala	Tyr	Lys	Asn 265	Tyr	Phe	Arg	Ala	Gly 270	Ala	His

Trp Ile Val Phe Ile Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val 275 280 285

Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln 290 295 300

Ser Met Leu Asn Val Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys 305 310 315 320

Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala 325 330 335

Thr Val Leu Phe Gly Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu 340 345 350

Val Asn Ser Ser Gln Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu 355 360 365

Lys Ala Pro Val Leu Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu 370 375 380

Asn Arg Phe Ser Lys Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu 385 390 395 400

Thr Phe Leu Asp Phe Ile Gln Val Thr Leu Arg Val Met Ser Gly Ser 405 410 415

Gln Met Glu Asn Gly Ser Ser Tyr Phe Phe Lys Pro Phe Ser Trp Gly
420 425 430

Leu Gly Val Gly Leu Ser Ala Trp Leu Cys Val Met Leu Thr 435 440 445

<210> 1554

<211> 446

<212> PRT

<213> Homo sapiens

<400> 1554

Arg Lys Cys Glu Leu Ala His Cys Ser Leu Gly Val Phe Gly Val Arg

1 5 10 15

Met Ala Leu Glu Gly Met Ser Lys Arg Lys Arg Lys Arg Ser Val Gln

Glu Gly Glu Asn Pro Asp Asp Gly Val Arg Gly Ser Pro Pro Glu Asp 35 40 45

Tyr Arg Leu Gly Gln Val Ala Ser Ser Leu Phe Arg Gly Glu His His

50 55 60 Ser Arg Gly Gly Thr Gly Arg Leu Ala Ser Leu Phe Ser Ser Leu Glu 75 70 Pro Gln Ile Gln Pro Val Tyr Val Pro Val Pro Lys Gln Thr Ile Lys Lys Thr Lys Arg Asn Glu Glu Glu Glu Ser Thr Ser Gln Ile Glu Arg 100 105 Pro Leu Ser Gln Glu Pro Ala Lys Lys Val Lys Ala Lys Lys His Thr Asn Ala Glu Lys Lys Leu Ala Asp Arg Glu Ser Ala Leu Ala Ser 135 Ala Asp Leu Glu Glu Glu Ile His Gln Lys Gln Gly Gln Lys Arg Lys 155 145 150 Asn Ser Gln Pro Gly Val Lys Val Ala Asp Arg Lys Ile Leu Asp Asp 165 170 Thr Glu Asp Thr Val Val Ser Gln Arg Lys Lys Ile Gln Ile Asn Gln Glu Glu Glu Arg Leu Lys Asn Glu Arg Thr Val Phe Val Gly Asn Leu 195 200 Pro Val Thr Cys Asn Lys Lys Leu Lys Ser Phe Phe Lys Glu Tyr 215 Gly Gln Ile Glu Ser Val Arg Phe Arg Ser Leu Ile Pro Ala Glu Gly 235 230 Thr Leu Ser Lys Lys Leu Ala Ala Ile Lys Arg Lys Ile His Pro Asp 245 Gln Lys Asn Ile Asn Ala Tyr Val Val Phe Lys Glu Glu Ser Ala Ala 260 Thr Gln Ala Leu Lys Arg Asn Gly Ala Gln Ile Ala Asp Gly Phe Arg 280 Ile Arg Val Asp Leu Ala Ser Glu Thr Ser Ser Arg Asp Lys Arg Ser 290 Val Phe Val Gly Asn Leu Pro Tyr Lys Val Glu Glu Ser Ala Ile Glu 305 310 315 Lys His Phe Leu Asp Cys Gly Ser Ile Met Ala Val Arg Ile Val Arg 325 330 335

Asp Lys Met Thr Gly Ile Gly Lys Gly Phe Gly Tyr Val Leu Phe Glu 340 345 350

Asn Thr Asp Ser Val His Leu Ala Leu Lys Leu Asn Asn Ser Glu Leu
355 360 365

Met Gly Arg Lys Leu Arg Val Met Arg Ser Val Asn Lys Glu Lys Phe 370 375 380

Lys Gln Gln Asn Ser Asn Pro Arg Leu Lys Asn Val Ser Lys Pro Lys 385 390 395 400

Gln Gly Leu Asn Phe Thr Ser Lys Thr Ala Glu Gly His Pro Lys Ser 405 410 415

Leu Phe Ile Gly Glu Lys Ala Val Leu Leu Lys Thr Lys Lys Gly
420 425 430

Gln Lys Lys Ser Gly Arg Pro Lys Lys Gln Arg Lys Gln Lys
435
440
445

<210> 1555

<211> 115

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1555

Ala Thr Xaa Val Gln His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr

1 10 15

Glu Cys Xaa Glu Cys Gly Lys Thr Phe Ser Arg Lys Asp Asn Leu Thr 20 25 30

Gln His Lys Arg Ile His Thr Gly Glu Met Pro Tyr Lys Cys Asn Glu 35 40 45

Cys Gly Xaa Tyr Phe Ser His His Ser Asn Leu Ile Val His Gln Arg 50 60

Val His Asn Gly Ala Arg Pro Tyr Lys Cys Ser Asp Cys Gly Lys Val 65 70 75 80

Phe Arg His Lys Ser Thr Leu Val Gln His Glu Ser Ile His Thr Gly 85 90 95

Glu Asn Pro Tyr Val Ala Val Leu Trp Glu Ile Leu Trp Pro Gln Ile 100 105 110

His Pro His

<210> 1556

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1556

Cys Gly Lys Thr Ala Ile Arg Lys Arg Lys Tyr Arg Ser Leu Asn Asn 1 5 10 15

Leu Trp Val Arg Lys Ala Ser Leu Asn Asn Gln Lys Leu Ala Val Leu 20 25 30

Ala Leu Phe Ser Ser Leu Phe Met Lys Met Lys Ser Glu Ile Thr Lys 35 40 45

Cys Lys Pro Gly Asn Ile Ile Leu Val Leu Leu Ser Trp Ile His Val 50 60

Lys Lys Arg Leu His Ser Leu Leu Met Leu Pro Thr Ser Cys Gly Phe 65 70 75 80

Val

<210> 1557

<211> 398

<212> PRT

<213> Homo sapiens

<400> 1557															
			Met	Val 5	Ser	Ser	Ser	Asn	Leu 10	Pro	Gln	Gly	Trp	Leu 15	Glu
Val	Gln	Gly	Ile 20	Pro	Glu	Gly	Trp	Asp 25	Gly	Val	Ala	Gly	Trp 30	Tyr	Leu
Pro	Gly	Ile 35	Asn	Pro	Gly	Arg	Thr 40	Ala	Arg	Arg	Phe	Ala 45	Tyr	Leu	Phe
Val	Asn 50	Ile	Asn	Val	Thr	Ser 55	Glu	Pro	His	Glu	Val 60	Leu	Ala	Leu	Trp
Phe 65	Leu	Trp	Tyr	Val	Lys 70	Gln	Cys	Gly	Gly	Thr 75	Thr	Arg	Ile	Phe	Ser 80
Val	Thr	Asn	Gly	Gly 85	Gln	Glu	Arg	Lys	Phe 90	Val	Gly	Gly	Ser	Gly 95	Gln
Val	Ser	Glu	Arg 100	Ile	Met	Asp	Leu	Leu 105	Gly	Asp	Gln	Val	Lys 110	Leu	Asn
His	Pro	Val 115	Thr	His	Val	Asp	Gln 120	Ser	Ser	Asp	Asn	11e 125	Ile	Ile	Glu
Thr	Leu 130	Asn	His	Glu	His	Tyr 135	Glu	Cys	Lys	Tyr	Val 140	Ile	Asn	Ala	Ile
Pro 145	Pro	Thr	Leu	Thr	Ala 150	Lys	Ile	His	Phe	Arg 155	Pro	Glu	Leu	Pro	Ala 160
Glu	Arg	Asn	Gln	Leu 165	Ile	Gln	Arg	Leu	Pro 170	Met	Gly	Ala	Val	Ile 175	Lys
Cys	Met	Met	Tyr 180	Tyr	Lys	Glu	Ala	Phe 185	Trp	Lys	Lys	Lys	Asp 190	Tyr	Cys
Gly	Cys	Met 195	Ile	Ile	Glu	Asp	Glu 200	Asp	Ala	Pro	Ile	Ser 205	Ile	Thr	Leu
Asp	Asp 210	Thr	Lys	Pro	Asp	Gly 215	Ser	Leu	Pro	Ala	Ile 220	Met	Gly	Phe	Ile
Leu 225	Ala	Arg	Lys	Ala	Asp 230	Arg	Leu	Ala	Lys	Leu 235	His	Lys	Glu	Ile	Arg 240
Lys	Lys	Lys	Ile	Cys 245	Glu	Leu	Tyr	Ala	Lys 250	Val	Leu	Gly	Ser	Gln 255	Glu

Ala Leu His Pro Val His Tyr Glu Glu Lys Asn Trp Cys Glu Gln

265 270 260 Tyr Ser Gly Gly Cys Tyr Thr Ala Tyr Phe Pro Pro Gly Ile Met Thr 280 Gln Tyr Gly Arg Val Ile Arg Gln Pro Val Gly Arg Ile Phe Phe Ala 295 Gly Thr Glu Thr Ala Thr Lys Trp Ser Gly Tyr Met Glu Gly Ala Val 315 305 310 Glu Ala Gly Glu Arg Ala Ala Arg Glu Val Leu Asn Gly Leu Gly Lys 325 Val Thr Glu Lys Asp Ile Trp Val Gln Glu Pro Glu Ser Lys Asp Val 345 Pro Ala Val Glu Ile Thr His Thr Phe Trp Glu Arg Asn Leu Pro Ser 360 355 Val Ser Gly Leu Leu Lys Ile Ile Gly Phe Ser Thr Ser Val Thr Ala 375 Leu Gly Phe Val Leu Tyr Lys Tyr Lys Leu Leu Pro Arg Ser 390 <210> 1558 <211> 401 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1558 Ser Leu Ala Ala Pro Gly Ile Pro Glu His Arg Gln Arg Gly Thr Glu 10

Leu Ala Pro Ser Ala Gly Pro Ala Pro Arg Met Arg Ala Asp Ala Gly
35 40 45

Lys Glu Ser Phe Phe Leu Gly Ser Gln Ser Arg Lys Gly Gly Ala Ala

20

Gly Arg Gly Cys Gly Ser Ala Asn Gly Xaa Pro Gly Ala Pro His Val
50 55 60

Arg 65	Ala	Ala	Gly	Pro	Ala 70	Ala	Ala	Ala	Val	Pro 75	Gly	Ala	Arg	Val	Val 80
Cys	Gly	Gly	Ser	Arg 85	Pro	Arg	Gln	Gln	Val 90	Asp	Ser	Ser	Lys	Glu 95	Ser
Ala	Glu	Ala	Ala 100	Cys	Asp	Ile	Leu	Ser 105	Gln	Leu	Val	Asn	Cys 110	Ser	Leu
Lys	Thr	Leu 115	Gly	Leu	Ile	Ser	Thr 120	Ala	Arg	Pro	Ser	Phe 125	Met	Asp	Leu
Pro	Lys 130	Ser	His	Phe	Ile	Ser 135	Ala	Leu	Thr	Val	Val 140	Phe	Val	Asn	Ser
Lys 145	Ser	Leu	Ser	Ser	Leu 150	Lys	Ile	Asp	Asp	Thr 155	Pro	Val	Asp	Asp	Pro 160
Ser	Leu	Lys	Val	Leu 165	Val	Ala	Asn	Asn	Ser 170	Asp	Thr	Leu	Lys	Leu 175	Leu
Lys	Met	Ser	Ser 180	Cys	Pro	His	Val	Ser 185	Pro	Ala	Gly	Ile	Leu 190	Cys	Val
Ala	Asp	Gln 195	Cys	His	Gly	Leu	Arg 200	Glu	Leu	Ala	Leu	Asn 205	Tyr	His	Leu
Leu	Ser 210	Asp	Glu	Leu	Leu	Leu 215	Ala	Leu	Ser	Ser	Glu 220	Lys	His	Val	Arg
Leu 225	Glu	His	Leu	Arg	11e 230	Asp	Val	Val	Ser	Glu 235	Asn	Pro	Gly	Gln	Thr 240
His	Phe	His	Thr	11e 245	Gln	Lys	Ser	Ser	Trp 250	Asp	Ala	Phe	Ile	Arg 255	His
Ser	Pro	Lys	Val 260	Asn	Leu	Val	Met	Tyr 265	Phe	Phe	Leu	Tyr	Glu 270	Glu	Glu
Phe	Asp	Pro 275	Phe	Phe	Arg	Tyr	Glu 280	Ile	Pro	Ala	Thr	His 285	Leu	Tyr	Phe
Gly	Arg 290	Ser	Val	Ser	Lys	Asp 295	Val	Leu	Gly	Arg	Val 300	Gly	Met	Thr	Cys
Pro 305	Arg	Leu	Val	Glu	Leu 310	Val	Val	Cys	Ala	Asn 315	Gly	Leu	Arg	Pro	Leu 320
Asp	Glu	Glu	Leu	Ile 325	Arg	Ile	Ala	Glu	Arg 330	Cys	Lys	Asn	Leu	Ser 335	Ala

Ile Gly Leu Gly Glu Cys Glu Val Ser Cys Ser Ala Phe Val Glu Phe 340 345 350

Val Lys Met Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met Glu Glu 355 360 365

Val Leu Ile Pro Asp Gln Lys Tyr Ser Leu Glu Gln Ile His Trp Glu 370 375 380

Val Ser Lys His Leu Gly Arg Val Trp Phe Pro Asp Met Met Pro Thr 385 390 395 400

Trp

<210> 1559

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1559

Ala Gly Ala Gly Gly Arg Val Gly Asp Arg Ala Gly Val Arg Glu Arg
1 5 10 15

Gln Gln Ser Gly His Arg His Ser Glu Gln Pro Arg Arg Arg Leu Cys 20 25 30

Val Pro Val Asp Cys Leu Ala Ala Pro Ser Pro Thr Pro Arg Phe Leu 35 40 45

Val Lys Arg Leu Arg Ala Ala Val Trp Gly Gly Gly Val Trp Ser Arg 50 55 60

Val Leu Cys Pro Gln Trp Leu Leu Ser Gly Gly Arg Leu Phe Ala Glu 65 70 75 80

Val Arg Arg Asp Ser Leu Gly Val Glu His Ile Thr Gly Phe Gly Cys 85 90 95

Leu Val Cys Glu His His Arg Val Cys Gly Cys Thr 100 105

<210> 1560

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1560

Glu Leu Ser Pro Leu Ser Phe Arg Ser Thr Arg Gly Phe His Thr Tyr

1 5 10 15

Phe Ile Glu His Pro Phe Ile Phe Ile Ser Val Tyr Arg Thr Lys Lys 20 . 25 30

Asn Ser Ser Val Lys Asn Leu Cys Cys Gly Leu Ser Ile Phe Ala Ala 35 40 45

Phe Gly Leu Arg Trp Arg Ile Lys Ala Ser Leu Pro Leu Ser Ser Val 50 55 60

Phe Arg Lys Leu 65

<210> 1561

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1561

Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile 1 5 10 15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp
20 25 30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Lys Trp 50 55 60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser 65 70 75 80

<210> 1562

<211> 198

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (193)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1562

Arg Gly Leu Xaa Ser Arg Gly Ala Gly Gln Val Pro Gly Cys Leu Gly
1 5 10 15

Trp His Arg Ser Val Val Pro Gly Gly Ala Val Ala Ala Leu Pro Pro 20 25 30

Ser Arg Arg Gln Arg Val Arg Gly Pro Val Arg Pro Glu Pro Gly Ala 35 40 45

Thr Pro Arg Ala Val Leu Gly Glu Thr Arg Val Pro Val Leu Arg Leu 50 55 60

Leu Leu Gly Ser Ala Leu Val Gly Arg Leu Leu Asp Ser Leu Lys Arg
65 70 75 80

Asp Tyr Ala Gly Lys Pro Gln Pro Pro Ile Lys Ser Glu Arg Arg Asn 85 90 95

Pro Pro Ser Tyr Ala Met Ala Gly Lys Lys Val Leu Ile Val Tyr Ala 100 \$105\$

His Gln Glu Pro Lys Ser Phe Asn Gly Ser Leu Lys Asn Val Ala Val 115 120 125

Asp Glu Leu Ser Arg Gln Gly Cys Thr Val Thr Val Ser Asp Leu Tyr 130 135 140

Ala Met Asn Phe Glu Pro Arg Ala Thr Asp Lys Asp Ile Thr Gly Thr 145 150 155 160

Leu Ser Asn Pro Glu Val Phe Asn Tyr Gly Val Glu Thr His Glu Ala 165 170 175

Tyr Lys Gln Arg Ser Leu Ala Ser Asp Ile Thr Asp Glu Gln Lys Lys 180 185 190

Xaa Ser Gly Arg Leu Thr 195 <211> 488

<212> PRT

<213> Homo sapiens

<400> 1563

Gly Arg Glu Ala Ser Lys Met Ala Gln Thr Gln Gly Thr Arg Arg Lys
1 5 10 15

Val Cys Tyr Tyr Tyr Asp Gly Asp Val Gly Asn Tyr Tyr Tyr Gly Gln
20 25 30

Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Asn Leu Leu 35 40 45

Leu Asn Tyr Gly Leu Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys 50 55 60

Ala Asn Ala Glu Glu Met Thr Lys Tyr His Ser Asp Asp Tyr Ile Lys 65 70 75 80

Phe Leu Arg Ser Ile Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln 85 90 95

Met Gln Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp Gly Leu 100 105 110

Phe Glu Phe Cys Gln Leu Ser Thr Gly Gly Ser Val Ala Ser Ala Val 115 120 125

Lys Leu Asn Lys Gln Gln Thr Asp Ile Ala Val Asn Trp Ala Gly Gly
130 135 140

Leu His His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn 145 150 155 160

Asp Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val 165 170 175

Leu Tyr Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala 180 185 190

Phe Tyr Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly
195 200 205

Glu Tyr Phe Pro Gly Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys 210 215 220

Gly Lys Tyr Tyr Ala Val Asn Tyr Pro Leu Arg Asp Gly Ile Asp Asp 225 230 235 240

Glu Ser Tyr Glu Ala Ile Phe Lys Pro Val Met Ser Lys Val Met Glu

245 250 255 Met Phe Gln Pro Ser Ala Val Leu Gln Cys Gly Ser Asp Ser Leu 260 265 Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Thr Ile Lys Gly His Ala 280 Lys Cys Val Glu Phe Val Lys Ser Phe Asn Leu Pro Met Leu Met Leu 290 295 Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr 310 315 Glu Thr Ala Val Ala Leu Asp Thr Glu Ile Pro Asn Glu Leu Pro Tyr 325 330 Asn Asp Tyr Phe Glu Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr Asn Gln Asn Thr Asn Glu Tyr Leu Glu Lys Ile 360 Lys Gln Arg Leu Phe Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly 375 Val Gln Met Gln Ala Ile Pro Glu Asp Ala Ile Pro Glu Glu Ser Gly 385 390 395 Asp Glu Asp Glu Asp Asp Pro Asp Lys Arg Ile Ser Ile Cys Ser Ser 410 Asp Lys Arg Ile Ala Cys Glu Glu Glu Phe Ser Asp Ser Glu Glu Glu 420 425 Gly Glu Gly Gly Arg Lys Asn Ser Ser Asn Phe Lys Lys Ala Lys Arg 435 440 Val Lys Thr Glu Asp Glu Lys Glu Lys Asp Pro Glu Glu Lys Lys Glu 455 Val Thr Glu Glu Lys Thr Lys Glu Glu Lys Pro Glu Ala Lys Gly 470 475 Val Lys Glu Glu Val Lys Leu Ala 485

<210> 1564 <211> 197

```
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (179)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1564
Ala Arg Ser Ser Leu Trp Arg Arg Gln Pro Gly Trp Gln Leu Thr Gly
                                     10
Gln Pro Gly Ser Ile Leu Leu Arg Val Phe Ser Lys Ser Arg Ala Gly
                                 25
Leu Glu Ala Arg Lys Leu Lys Ala Tyr Arg Thr Met Glu Tyr Met Ala
         35
                             40
Glu Ser Thr Asp Arg Ser Pro Gly His Ile Leu Cys Cys Glu Cys Gly
Val Pro Ile Ser Pro Asn Pro Ala Asn Ile Cys Val Ala Cys Leu Arg
                     70
                                         75
Ser Lys Val Asp Ile Ser Gln Gly Ile Pro Lys Gln Val Ser Ile Ser
                 85
                                     90
Phe Cys Lys Gln Cys Gln Arg Tyr Phe Gln Pro Pro Gly Thr Trp Ile
            100
                                105
                                                     110
Gln Cys Ala Leu Glu Ser Arg Glu Leu Leu Ala Leu Cys Leu Lys Lys
```

115 120 125 Ile Lys Ala Pro Leu Ser Lys Val Arg Leu Val Asp Ala Gly Phe Val 135 Trp Thr Glu Pro His Ser Lys Arg Leu Lys Xaa Lys Leu Thr Ile Gln 150 155 Lys Glu Val Met Asn Gly Ala Ile Leu Gln Gln Val Phe Val Val Asp 165 Tyr Xaa Xaa Pro Lys Trp Gly Glu Met Ala Xaa Arg Xaa Leu Arg Ile 185 Leu Glu Arg Leu Asp 195 <210> 1565 <211> 197 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (179) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (189) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (190) <223> Xaa equals any of the naturally occurring L-amino acids Met Gln Phe Ala Trp Gln Ser Tyr Lys Arg Tyr Ala Met Gly Lys Asn Glu Leu Arg Pro Leu Thr Lys Asp Gly Tyr Glu Gly Asn Met Phe Gly 25 Gly Leu Ser Gly Ala Thr Val Ile Asp Ser Leu Asp Thr Leu Tyr Leu 35 40 Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp Val Gly Glu

55

50

Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe Glu Val Asn 65 Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu 85 90 Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser Phe Lys 120 Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile Leu Ala 135 Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser 150 155 Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys Val Leu 165 170 Arg Lys Xaa Glu Lys Pro Phe Gly Leu Tyr Ser Asn Xaa Xaa Met Val 185 Leu Gln Thr Asp Pro 195 <210> 1566 <211> 240 <212> PRT <213> Homo sapiens <400> 1566 Ala Asp Pro Glu Gly Gln Ala Gly Arg Ala Gly Arg Ala Leu Arg Arg His Gly His Leu His Glu Gly Ser Asp Arg Ala Gly Arg Arg Ala Val Gln Arg Gly Ala Gln Pro Ala Leu Arg Gly Leu Gln Glu Arg Gly Arg 40

Gly Pro Gln Ser Ala Trp Arg Val Ile Ser Ser Ile Glu Gln Lys Thr

Asp Thr Ser Asp Lys Lys Leu Gln Leu Ile Lys Asp Tyr Arg Glu Lys

75

55

70

Val Glu Ser Glu Leu Arg Ser Ile Cys Thr Thr Val Leu Glu Leu Leu Asp Lys Tyr Leu Ile Ala Asn Ala Thr Asn Pro Glu Ser Lys Val Phe 105 Tyr Leu Lys Met Lys Gly Asp Tyr Phe Arg Tyr Leu Ala Glu Val Ala 115 120 Cys Gly Asp Asp Arg Lys Gln Thr Ile Asp Asn Ser Gln Gly Ala Tyr Gln Glu Ala Phe Asp Ile Ser Lys Lys Glu Met Gln Pro Thr His Pro 150 155 Ile Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile 165 170 Leu Asn Asn Pro Glu Leu Ala Cys Thr Leu Ala Lys Thr Ala Phe Asp 185 Glu Ala Ile Ala Glu Leu Asp Thr Leu Asn Glu Asp Ser Tyr Lys Asp 200 Ser Thr Leu Ile Met Gln Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr 210 215 Ser Asp Ser Ala Gly Glu Glu Cys Asp Ala Ala Glu Gly Ala Glu Asn 225 230 235

<210> 1567

<211> 220

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1567

Lys Ala Arg Arg Gly Thr Met Ala Ala Ala Ala Asp Glu Arg Ser
1 5 10 15

Pro Glu Asp Gly Glu Asp Glu Glu Glu Glu Gln Leu Val Leu Val 20 25 30

Glu Leu Ser Gly Ile Ile Asp Ser Xaa Phe Leu Ser Lys Cys Glu Asn 35 40 45

Lys Cys Lys Val Leu Gly Ile Asp Thr Glu Arg Pro Ile Leu Gln Val
50 60

Asp Ser Cys Val Phe Ala Gly Glu Tyr Glu Asp Thr Leu Gly Thr Cys 65 70 75 80

Val Ile Phe Glu Glu Asn Val Glu His Ala Asp Thr Glu Gly Asn Asn 85 90 95

Lys Thr Val Leu Lys Tyr Lys Cys His Thr Met Lys Lys Leu Ser Met 100 105 110

Thr Arg Thr Leu Leu Thr Glu Lys Lys Glu Gly Glu Glu Asn Ile Gly 115 120 125

Gly Val Glu Trp Leu Gln Ile Lys Asp Asn Asp Phe Ser Tyr Arg Pro 130 135 140

Asn Met Ile Cys Asn Phe Leu His Glu Asn Glu Asp Glu Glu Val Val 145 150 155 160

Ala Ser Ala Pro Asp Lys Ser Leu Glu Leu Glu Glu Glu Glu Ile Gln 165 170 175

Met Asn Asp Ser Ser Asn Leu Ser Cys Glu Gln Glu Lys Pro Met His 180 $$185\$

Leu Glu Ile Glu Asp Ser Gly Pro Leu Ile Asp Ile Pro Ser Glu Thr
195 200 205

Glu Gly Ser Val Phe Met Glu Thr Gln Met Leu Pro 210 215 220

<210> 1568

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1568

Ala Trp Gln Glu Phe Gly Gln Xaa Pro Gly Ala Xaa Trp Gln Arg Arg
1 5 10 15

Cys Ala Cys Val Val Glu Cys Ser Gly Arg Arg Pro Ala Gly Ala Met
20 25 30

Val Phe Leu Thr Ala Gln Leu Trp Leu Arg Asn Arg Val Thr Asp Arg 35 40 45

Tyr Phe Arg Ile Gln Glu Val Leu Lys His Ala Arg His Phe Arg Gly
50 55 60

Arg Lys Asn Arg Cys Tyr Arg Leu Ala Val Arg Thr Val Ile Arg Ala 65 70 75 80

Phe Val Lys Cys Thr Lys Ala Arg Tyr Leu Lys Lys Lys Asn Met Arg 85 90 95

Thr Leu Trp Ile Asn Arg Ile Thr Ala Ala Ser Gln Glu His Gly Leu 100 105 110

Lys Tyr Pro Ala Leu Ile Gly Asn Leu Val Lys Cys Gln Val Glu Leu 115 120 125

Asn Arg Lys Val Leu Ala Asp Leu Ala Ile Tyr Glu Pro Lys Thr Phe 130 135 140

Lys Ser Leu Ala Ala Leu Ala Ser Arg Arg His Glu Gly Phe Ala 145 150 155 160

Ala Ala Leu Gly Asp Gly Lys Glu Pro Glu Gly Ile Phe Ser Arg Val 165 170 175

Val Gln Tyr His 180

<210> 1569

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1569

Ala Gly Pro Tyr Ala Asp Ser Ile Trp Ala Pro Ala Arg Ser Ala Ala 1 5 10 15 Gly Gln Arg Gly Val Ala Met Ala Glu Leu Gln Gln Leu Arg Val Gln 20 25 30

Glu Ala Val Glu Ser Met Val Lys Ser Leu Glu Arg Glu Asn Ile Arg 35 40 45

Lys Met Gln Gly Leu Met Phe Arg Cys Ser Ala Ser Cys Cys Glu Asp
50 55 60

Ser Gln Ala Ser Met Lys Gln Val His Gln Cys Ile Glu Arg Cys His 65 70 75 80

Val Pro Leu Ala Gln Ala Gln Ala Leu Val Thr Ser Glu Leu Glu Lys 85 90 95

Phe Gln Asp Arg Leu Ala Arg Cys Thr Met His Cys Asn Asp Lys Ala 100 105 110

Lys Asp Ser Ile Asp Ala Gly Ser Lys Glu Leu Gln Val Lys Gln Gln
115 120 125

Leu Asp Ser Cys Val Thr Lys Cys Val Asp Asp His Met His Leu Ile 130 135 140

Pro Thr Met Thr Lys Lys Met Lys Glu Ala Leu Leu Ser Ile Gly Lys 145 150 155 160

<210> 1570

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570

Gly Leu Ser Asp His Leu Val Phe Pro Phe Ser Ala Xaa His Val Ser 1 5 10 15

Arg Gly Val Ala Pro Tyr His Thr Ser Arg Ala Pro Glu Pro Tyr Phe

Leu Ile Ser Ser Gly Leu Asp Phe Pro Val Leu His Gln Gln Leu Gln 35 40 45

Tyr Pro Lys Leu Ser Ser Pro Ala Asp Pro Pro Ser Asn Gly Val Glu
50 60

Thr Gly Gly Gln Cys Leu Val Cys Phe Leu Arg Asn Leu 65 70 75

<210> 1571

<211> 218

<212> PRT

<213> Homo sapiens

<400> 1571

Glu Gly Pro Ile Pro Trp Gly Arg Arg Arg Glu Pro Glu Pro Leu
1 5 10 15

Leu Pro Met Ala Lys Lys Thr Tyr Asp Leu Leu Phe Lys Leu Leu 20 25 30

Ile Gly Asp Ser Gly Val Gly Lys Thr Cys Val Leu Phe Arg Phe Ser 35 40 45

Asp Asp Ala Phe Asn Thr Thr Phe Ile Ser Thr Ile Gly Ile Asp Phe 50 55 60

Lys Ile Lys Thr Val Glu Leu Gln Gly Lys Lys Ile Lys Leu Gln Ile 65 70 75 80

Trp Asp Thr Ala Gly Gln Glu Arg Phe His Thr Ile Thr Thr Ser Tyr 85 90 95

Tyr Arg Gly Ala Met Gly Ile Met Leu Val Tyr Asp Ile Thr Asn Gly
100 105 110

Lys Ser Phe Glu Asn Ile Ser Lys Trp Leu Arg Asn Ile Asp Glu His
115 120 125

Ala Asn Glu Asp Val Glu Arg Met Leu Leu Gly Asn Lys Cys Asp Met 130 135 140

Asp Asp Lys Arg Val Val Pro Lys Gly Lys Gly Glu Gln Ile Ala Arg 145 150 155 160

Glu His Gly Ile Arg Phe Phe Glu Thr Ser Ala Lys Ala Asn Ile Asn 165 170 175

Ile Glu Lys Ala Phe Leu Thr Leu Ala Glu Asp Ile Leu Arg Lys Thr 180 185 190 Pro Val Lys Glu Pro Asn Ser Glu Asn Val Asp Ile Ser Ser Gly Gly
195 200 205

Gly Val Thr Gly Trp Lys Ser Lys Cys Cys 210 215

<210> 1572

<211> 265

<212> PRT

<213> Homo sapiens

<400> 1572

Arg Asn Leu Leu Ala Trp Pro Arg Arg Leu Ser Gly Ile Ala Arg Ala 1 5 10 15

Leu Arg Phe Ile Ala Thr Pro Arg Leu Ser Ala Met Pro His Ile Asp 20 25 30

Asn Asp Val Lys Leu Asp Phe Lys Asp Val Leu Leu Arg Pro Lys Arg
35 40 45

Ser Thr Leu Lys Ser Arg Ser Glu Val Asp Leu Thr Arg Ser Phe Ser 50 55 60

Phe Arg Asn Ser Lys Gln Thr Tyr Ser Gly Val Pro Ile Ile Ala Ala 65 70 75 80

Asn Met Asp Thr Val Gly Thr Phe Glu Met Ala Lys Val Leu Cys Lys 85 90 95

Phe Ser Leu Phe Thr Ala Val His Lys His Tyr Ser Leu Val Gln Trp
100 105 110

Gln Glu Phe Ala Gly Gln Asn Pro Asp Cys Leu Glu His Leu Ala Ala 115 120 125

Ser Ser Gly Thr Gly Ser Ser Asp Phe Glu Gln Leu Glu Gln Ile Leu 130 135 140

Glu Ala Ile Pro Gln Val Lys Tyr Ile Cys Leu Asp Val Ala Asn Gly
145 150 155 160

Tyr Ser Glu His Phe Val Glu Phe Val Lys Asp Val Arg Lys Arg Phe
165 170 175

Pro Gln His Thr Ile Met Ala Gly Asn Val Val Thr Gly Glu Met Val 180 185 190

Glu Glu Leu Ile Leu Ser Gly Ala Asp Ile Ile Lys Val Gly Ile Gly

195 200 205

Pro Gly Ser Val Cys Thr Thr Arg Lys Lys Thr Gly Val Gly Tyr Pro 210 215 220

Gln Leu Ser Ala Val Met Glu Cys Ala Asp Ala Ala His Gly Leu Lys 225 230 235 240

Gly Thr Ser Phe Gln Met Glu Val Ala Ala Val Leu Gly Met Trp Pro 245 250 255

Arg Leu Leu Gly Gln Glu Leu Thr Ser 260 265

<210> 1573

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1573

Glu Thr Thr Thr Thr Leu Trp Arg Arg Asn Ala Asn Gly Asp Pro 1 5 10 15

Val Cys Asn Ala Cys Gly Leu Tyr Tyr Lys Leu His Asn Val Asn Arg
20 25 30

Pro Leu Thr Met Lys Lys Glu Gly Ile Gln Thr Arg Asn Arg Lys Met 35 40 45

Ser Asn Lys Ser Lys Lys Ser Lys Lys Gly Ala Glu Cys Phe Glu Glu 50 55 60

Leu Ser Lys Cys Met Gln Glu Lys Ser Ser Pro Phe Ser Ala Ala Ala 65 70 75 80

Leu Ala Gly His Met Ala Pro Val Gly His Leu Pro Pro Phe Ser His
85 90 95

Ser Gly His Ile Leu Pro Thr Pro Thr Pro Ile His Pro Ser Ser Ser 100 105 110

Leu Ser Phe Gly His Pro His Pro Ser Ser Met Val Thr Ala Met Gly
. 115 120 125

<210> 1574 <211> 334 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1574 Gly Ala Arg Xaa Asp Arg Ala Leu Leu Arg Pro Pro Leu Leu Arg Glu 10 Leu Thr Pro Arg Ser Pro Arg Pro Pro Leu Ala Pro Ala Ala Arg Pro 25 Ser Trp Pro Cys Leu Cys Leu Asp Gly Gly Val Ser Gly Val Phe Val 40 45 Trp Asp Glu Glu Arg Ile Gln Glu Glu Leu Gln Arg Ser Ile Asn Glu Met Lys Arg Leu Glu Glu Met Ser Asn Met Phe Gln Ser Ser Gly 70 Val Gln His His Pro Pro Glu Pro Lys Ala Gln Thr Glu Gly Asn Glu Asp Ser Glu Gly Lys Glu Gln Arg Trp Glu Met Val Met Asp Lys Lys 100 105 His Phe Lys Leu Trp Arg Arg Pro Ile Thr Gly Thr His Leu Tyr Gln 120 Tyr Arg Val Phe Gly Thr Tyr Thr Asp Val Thr Pro Arg Gln Phe Phe 130 135 Asn Val Gln Leu Asp Thr Glu Tyr Arg Lys Lys Trp Asp Ala Leu Val 145 150 Ile Lys Leu Glu Val Ile Glu Arg Asp Val Val Ser Gly Ser Glu Val 170 165 Leu His Trp Val Thr His Phe Pro Tyr Pro Met Tyr Ser Arg Asp Tyr 180 185 Val Tyr Val Arg Arg Tyr Ser Val Asp Gln Glu Asn Asn Met Met Val 195 200

Leu Val Ser Arg Ala Val Glu His Pro Ser Val Pro Glu Ser Pro Glu

210 215 220 Phe Val Arg Val Arg Ser Tyr Glu Ser Gln Met Val Ile Arg Pro His 230 235 Lys Ser Phe Asp Glu Asn Gly Phe Asp Tyr Leu Leu Thr Tyr Ser Asp 250 Asn Pro Gln Thr Val Phe Pro Arg Tyr Cys Val Ser Trp Met Val Ser 265 270 Ser Gly Met Pro Asp Phe Leu Glu Lys Leu His Met Ala Thr Leu Lys 280 Ala Lys Asn Met Glu Ile Lys Val Lys Asp Tyr Ile Ser Ala Lys Pro 295 300 Leu Glu Met Ser Ser Glu Ala Lys Ala Thr Ser Gln Ser Ser Glu Arg 305 310 315 Lys Asn Glu Gly Ser Cys Gly Pro Ala Arg Ile Glu Tyr Ala 330 <210> 1575 <211> 335 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (125) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (218) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (219) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (268)

<400> 1575

Pro Ser Ala Pro Arg Ala Leu Thr Leu Gln Arg Arg Lys Ile Gly Arg 10 Arg Gly Gln Ala Leu Met Leu Val Ser Gly Arg Arg Leu Leu Thr Val Leu Leu Gln Ala Gln Lys Trp Pro Phe Gln Pro Ser Arg Asp Met Arg Leu Val Gln Phe Arg Ala Pro His Leu Val Gly Pro His Leu Gly Leu Glu Thr Gly Asn Gly Gly Gly Val Ile Asn Leu Asn Ala Phe Asp Pro Thr Leu Pro Lys Thr Met Thr Gln Phe Leu Glu Gln Gly Glu Ala 85 Thr Leu Ser Val Ala Arg Arg Ala Leu Ala Ala Gln Leu Pro Val Leu 105 Pro Arg Ser Glu Val Thr Phe Leu Ala Pro Val Thr Xaa Pro Asp Lys 120 Val Val Cys Val Gly Met Asn Tyr Val Asp His Cys Lys Glu Gln Asn 130 135 Val Pro Val Pro Lys Glu Pro Ile Ile Phe Ser Lys Phe Ala Ser Ser 150 155 Ile Val Gly Pro Tyr Asp Glu Val Val Leu Pro Pro Gln Ser Gln Glu 170 Val Asp Trp Glu Val Glu Leu Ala Val Val Ile Gly Lys Lys Gly Lys 180 185 His Ile Lys Ala Thr Asp Ala Met Ala His Val Ala Gly Phe Thr Val 200 Ala His Asp Val Ser Ala Arg Asp Trp Xaa Xaa Arg Arg Asn Gly Lys 210 215 Gln Trp Leu Leu Gly Lys Thr Phe Asp Thr Phe Cys Pro Leu Gly Pro 225 230 235 Ala Leu Val Thr Lys Asp Ser Val Ala Asp Pro His Asn Leu Lys Ile Cys Cys Arg Val Asn Gly Glu Val Val Gln Ser Xaa Asn Thr Asn Gln 265

Met Val Phe Lys Thr Glu Asp Leu Ile Ala Trp Val Ser Gln Phe Val 275 280 285

Thr Phe Tyr Pro Gly Asp Val Ile Leu Thr Gly Thr Pro Pro Gly Val 290 295 300

Gly Val Phe Arg Lys Pro Pro Val Phe Leu Lys Lys Gly Asp Glu Val 305 310 315 320

Gln Cys Glu Ile Glu Glu Leu Gly Val Ile Ile Asn Lys Val Val 325 330 335

<210> 1576

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1576

Ile Pro Glu Asp Pro His Ile Asp Glu Ser Lys Ala Lys His Gln Ala 1 5 10 15

Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr
20 25 30

His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu 35 40

Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp 50 55 60

Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp 65 70 75 80

Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys 85 90 95

Asp Lys Leu Phe Gln Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val

His

<210> 1577

<211> 212

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1577

Gly Ala Ser Trp Xaa Ala Leu Thr Ala Ala Ser Ala Pro Gly Pro Trp

1 5 10 15

Pro Leu Ser Gly Met Ala Cys Gly Ala Thr Leu Lys Arg Pro Met Glu 20 25 30

Phe Glu Ala Ala Leu Leu Ser Pro Gly Ser Pro Lys Arg Arg Cys
35 40 45

Ala Pro Leu Pro Gly Pro Thr Pro Gly Leu Arg Pro Pro Asp Ala Glu 50 60

Pro Pro Pro Pro Phe Gln Thr Gln Thr Pro Pro Gln Ser Leu Gln Gln 65 70 75 80

Pro Ala Pro Pro Gly Ser Glu Arg Arg Leu Pro Thr Pro Glu Gln Ile 85 90 95

Phe Gln Asn Ile Lys Gln Glu Tyr Ser Arg Tyr Gln Arg Trp Arg His 100 105 110

Leu Glu Val Val Leu Asn Gln Ser Glu Ala Cys Ala Ser Glu Ser Gln
115 120 125

Pro His Ser Ser Ala Leu Thr Ala Pro Ser Ser Pro Gly Ser Ser Trp 130 135 140

Met Lys Lys Asp Gln Pro Thr Phe Thr Leu Arg Gln Val Gly Ile Ile 145 150 155 160

Cys Glu Arg Leu Leu Lys Asp Tyr Glu Asp Lys Ile Arg Glu Glu Tyr 165 170 175

Glu Gln Ile Leu Asn Thr Lys Leu Ala Glu Gln Tyr Glu Ser Phe Val 180 185 190

Lys Phe Thr His Asp Gln Ile Met Arg Arg Tyr Gly Thr Arg Pro Thr 195 200 205

Ser Tyr Val Ser 210

<211> 393 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (209) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1578 Arg Arg Arg Glu Ala Gln Glu Lys Arg Tyr Tyr Asp Leu Asp 10 Asp Ser Tyr Asp Glu Ser Asp Glu Glu Glu Val Arg Ala His Leu Arg 25 Cys Val Ala Glu Gln Pro Pro Leu Lys Leu Asp Thr Ser Ser Glu Lys 40 Leu Glu Phe Leu Gln Leu Phe Gly Leu Thr Thr Gln Gln Gln Lys Glu 55 Glu Leu Val Ala Gln Lys Arg Arg Lys Arg Arg Arg Met Leu Arg Glu 70 Arg Ser Pro Ser Pro Pro Thr Ile Gln Ser Lys Arg Gln Thr Pro Ser 90 Pro Arg Leu Ala Leu Ser Thr Arg Tyr Ser Pro Asp Glu Met Asn Asn 100 105 Ser Pro Asn Phe Glu Glu Lys Lys Lys Phe Leu Thr Ile Phe Asn Leu Thr His Ile Ser Ala Glu Lys Arg Lys Asp Lys Glu Arg Leu Val Glu Met Leu Arg Ala Met Lys Gln Lys Ala Leu Ser Ala Ala Val Ala Asp 145 150 155 Ser Leu Thr Asn Ser Pro Arg Asp Ser Pro Ala Val Ser Leu Ser Glu 165 170 Pro Ala Thr Gln Gln Ala Ser Leu Asp Val Glu Lys Pro Val Gly Val

Ala Ala Ser Leu Ser Asp Ile Pro Lys Ala Ala Asp Leu Gly Ser Trp
195 200 205

Xaa Gln Val Arg Pro Gln Glu Leu Ser Arg Val Gln Glu Leu Ala Pro

220

215

Ala Ser Gly Glu Lys Gly Gln Ala Glu Arg Gly Pro Trp Arg Gln Lys 225 230 Glu Ser Glu His Ala Ser Leu Tyr Pro Gly Arg Cys Thr Gln Gly His 245 250 Ser Cys Ala Ala Val Pro Gln His Gln Trp Glu Glu Gln Ala Val Gly 265 Ala Leu Cys Gly Arg Arg Val Cys Thr Ser Val Pro Arg Val Gln Cys 275 280 Cys Ser Pro Pro Arg Arg Pro Cys Arg Ser Ile Lys Gly Ala Trp Leu 295 Cys Cys Leu Gln Ser Arg Thr Thr Arg Leu Thr Arg Pro Ser Thr Thr 310 315 Thr Phe Leu Ser Cys Ser Pro Pro Ala Ala Pro Leu His Pro Ser Thr 325 330 Met Gly Ser Arg Ser Pro Pro Leu Gln Gly Arg Ala Pro Gln Pro Arg 345 Ser Trp Thr Gly Thr Arg Arg Arg Lys Arg Arg Met Met Lys Met 360 Glu Lys Met Arg Arg Lys Ser Pro Ser Ala Ser Gly Lys Gly Ser Arg 370 375 380 Pro Phe Leu Lys Leu Thr Arg Asn Thr 385 390 <210> 1579 <211> 39 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1579 Gln Ala Xaa Thr Thr Leu Thr Lys Gly Xaa Lys Ser Trp Ser Ser Thr 5 Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn 25 Ser Ala Arg Gly Arg Arg Asn 35 <210> 1580 <211> 286 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (237) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1580 Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Val Pro Ala Ser 5 10 Glu Ser Ala Val Val Gln Thr Glu Cys Ser Leu Leu Phe Val Trp 20 Leu Arg Phe His Ala Arg Arg Trp Leu Arg Met Ser Ser His Phe 40 Ala Ser Arg His Arg Lys Asp Ile Ser Thr Glu Met Ile Arg Thr Lys 50 55 Ile Ala His Arg Lys Ser Leu Ser Gln Lys Glu Asn Arg His Lys Glu 70 Tyr Glu Arg Asn Arg His Phe Gly Leu Lys Asp Val Asn Ile Pro Thr 90 Leu Glu Gly Arg Ile Leu Val Glu Leu Asp Glu Thr Ser Gln Gly Leu 100

Val Pro Glu Lys Thr Asn Val Lys Pro Arg Ala Met Lys Thr Ile Leu

120

115

Gly Asp Gln Arg Lys Gln Met Leu Gln Lys Tyr Lys Glu Glu Lys Gln 130 135 140

Leu Gln Lys Leu Lys Glu Gln Arg Glu Lys Ala Lys Arg Gly Ile Phe 145 150 155 160

Lys Val Gly Arg Tyr Arg Pro Asp Met Pro Xaa Phe Leu Leu Ser Asn 165 170 175

Gln Asn Ala Val Lys Ala Glu Pro Lys Lys Ala Ile Pro Ser Ser Val 180 185 190

Arg Ile Thr Arg Ser Lys Ala Lys Asp Gln Met Glu Gln Thr Lys Ile 195 200 205

Asp Asn Glu Ser Asp Val Arg Ala Ile Arg Pro Gly Pro Arg Gln Thr 210 215 220

Ser Glu Lys Lys Val Ser Asp Lys Glu Lys Lys Val Xaa Gln Pro Val 225 230 235 240

Met Pro Thr Ser Leu Arg Met Thr Arg Ser Ala Thr Gln Ala Ala Lys 245 250 255

Gln Val Pro Arg Thr Val Ser Ser Thr Thr Ala Arg Lys Pro Val Thr 260 265 270

Arg Ala Ala Asn Glu Asn Gly Thr Arg Arg Lys Gly Ala Lys 275 280 285

<210> 1581

<211> 276

<212> PRT

<213> Homo sapiens

<400> 1581

Asp Arg Arg Gly Ile Gly Ile Met Ala Ala Ala Leu Phe Val Leu Leu l 5 10 15

Gly Phe Ala Leu Leu Gly Thr His Gly Ala Ser Gly Ala Ala Gly Thr 20 25 30

Val Phe Thr Thr Val Glu Asp Leu Gly Ser Lys Ile Leu Leu Thr Cys
35 40 45

Ser Leu Asn Asp Ser Ala Thr Glu Val Thr Gly His Arg Trp Leu Lys
50 55 60

Gly Gly Val Val Leu Lys Glu Asp Ala Leu Pro Gly Gln Lys Thr Glu 65 70 75 80

Phe Lys Val Asp Ser Asp Asp Gln Trp Gly Glu Tyr Ser Cys Val Phe 85 90 95

Leu Pro Glu Pro Met Gly Thr Ala Asn Ile Gln Leu His Gly Pro Pro 100 105 110

Arg Val Lys Ala Val Lys Ser Ser Glu His Ile Asn Glu Gly Glu Thr 115 120 125

Ala Met Leu Val Cys Lys Ser Glu Ser Val Pro Pro Val Thr Asp Trp 130 135 140

Ala Trp Tyr Lys Ile Thr Asp Ser Glu Asp Lys Ala Leu Met Asn Gly
145 150 155 160

Ser Glu Ser Arg Phe Phe Val Ser Ser Ser Gln Gly Arg Ser Glu Leu 165 170 175

His Ile Glu Asn Leu Asn Met Glu Ala Asp Pro Gly Gln Tyr Arg Cys 180 185 190

Asn Gly Thr Ser Ser Lys Gly Ser Asp Gln Ala Ile Ile Thr Leu Arg 195 200 205

Val Arg Ser His Leu Ala Ala Leu Trp Pro Phe Leu Gly Ile Val Ala 210 215 220

Glu Val Leu Val Leu Val Thr Ile Ile Phe Ile Tyr Glu Lys Arg Arg 225 230 235 240

Lys Pro Glu Asp Val Leu Asp Asp Asp Asp Ala Gly Ser Ala Pro Leu 245 250 255

Lys Ser Ser Gly Gln His Gln Asn Asp Lys Gly Lys Asn Val Arg Gln 260 265 270

Arg Asn Ser Ser 275

<210> 1582

<211> 476

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (136) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1582 Thr Ile Ser Phe Pro Gly Arg Xaa Leu Asp Lys Phe Ile Lys Phe Phe 10 Ala Leu Lys Thr Val Gln Val Ile Val Gln Ala Arg Leu Gly Glu Lys Ile Cys Thr Arg Ser Ser Ser Pro Thr Gly Ser Asp Trp Phe Asn 40 Leu Ala Ile Lys Asp Ile Pro Glu Val Thr His Glu Ala Lys Lys Ala 55 Leu Ala Gly Gln Leu Pro Ala Val Gly Arg Ser Met Cys Val Glu Ile 65 70 Ser Leu Lys Thr Ser Glu Gly Asp Ser Met Glu Leu Glu Ile Trp Cys Leu Glu Met Asn Glu Lys Cys Asp Lys Glu Ile Lys Val Ser Tyr Thr 105 Val Tyr Asn Arg Leu Ser Leu Leu Leu Lys Ser Leu Leu Ala Ile Thr 115 120 Arg Val Thr Pro Ala Tyr Arg Xaa Ser Arg Lys Gln Gly His Glu Tyr 135 Val Ile Leu Tyr Arg Ile Tyr Phe Gly Glu Val Gln Leu Ser Gly Leu 155 Gly Glu Gly Phe Gln Thr Val Arg Val Gly Thr Val Gly Thr Pro Val 165 170 Gly Thr Ile Thr Leu Ser Cys Ala Tyr Arg Ile Asn Leu Ala Phe Met 180 185

Ser Thr Arg Gln Phe Glu Arg Thr Pro Pro Ile Met Gly Ile Ile Ile

Asp His Phe Val Asp Arg Pro Tyr Pro Ser Ser Ser Pro Met His Pro Cys Asn Tyr Arg Thr Ala Gly Glu Asp Thr Gly Val Ile Tyr Pro Ser Val Glu Asp Ser Gln Glu Val Cys Thr Thr Ser Phe Ser Thr Ser Pro Pro Ser Gln Leu Met Val Pro Gly Lys Glu Gly Gly Val Pro Xaa Ala Pro Asn Gln Pro Val His Gly Thr Gln Ala Asp Gln Glu Arg Leu Ala Thr Cys Thr Pro Ser Asp Arg Thr His Cys Ala Ala Thr Pro Ser Ser Ser Glu Asp Thr Glu Thr Val Ser Asn Ser Ser Glu Gly Arg Ala Ser Pro His Asp Val Leu Glu Thr Ile Phe Val Arg Lys Val Gly Ala Phe Val Asn Lys Pro Ile Asn Gln Val Thr Leu Thr Ser Leu Asp Ile Pro Phe Ala Met Phe Ala Pro Lys Asn Leu Glu Leu Glu Asp Thr Asp Pro Met Val Asn Pro Pro Asp Ser Pro Glu Thr Glu Ser Pro Leu Gln Gly Ser Leu His Ser Asp Gly Ser Ser Gly Gly Ser Ser Gly Asn Thr His Asp Asp Phe Val Met Ile Asp Phe Lys Pro Ala Phe Ser Lys Asp Asp Ile Leu Pro Met Asp Leu Gly Thr Phe Tyr Arg Glu Phe Gln Asn Pro Pro Gln Leu Ser Ser Leu Ser Ile Asp Ile Gly Ala Gln Ser Met Ala Glu Asp Leu Asp Ser Leu Pro Glu Lys Leu Ala Val His Glu Lys Asn Val Arg Glu Phe Asp Ala Phe Val Glu Thr Leu Gln

```
465
                     470
                                         475
<210> 1583
<211> 569
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (188)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (291)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (345)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (346)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (552)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (553)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (554) <223> Xaa equals any of the naturally occurring L-amino acids Gly Xaa Lys Ser Trp Cys Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Val Leu Ala Val Val 25 Ala Xaa Val Leu Lys Leu Gly Asn Ile Glu Phe Lys Pro Glu Ser Arg Val Asn Gly Leu Asp Glu Ser Lys Ile Lys Asp Lys Asn Glu Leu Lys Glu Ile Cys Glu Leu Thr Gly Ile Asp Gln Ser Val Leu Glu Arg Ala 75 Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val Ser Thr Thr 90 Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu Ala Lys Asn 100 105 Leu Tyr Ser Arg Leu Phe Ser Trp Leu Val Asn Arg Ile Asn Glu Ser 120 125 Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly Val Leu Asp 135 Ile Tyr Gly Phe Glu Ile Phe Glu Asp Asn Ser Phe Glu Gln Phe Ile 150 155 Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Ile Phe Ile Glu Leu Thr Leu Lys Glu Glu Glu Glu Tyr Ile Arg Glu Xaa Ile Glu Trp Thr 185 His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu Ile Glu Asn 195 200 205

Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys Leu Arg Pro

Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn Gln Val Cys

Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys Ser Arg Phe

235

250

215

230

245

Leu	Asn	Asp	Thr 260		Leu	Pro	His	Ser 265		Phe	Arg	Ile	Gln 270		туr
Ala	Gly	Lys 275	Val	Leu	Tyr	Gln	Val 280	Glu	Gly	Phe	Val	Asp 285	Lys	Asn	Asn
Asp	Leu 290	Xaa	Tyr	Arg	Asp	Leu 295	Ser	Gln	Ala	Met	Trp 300	Lys	Ala	Ser	His
Ala 305	Leu	Ile	Lys	Ser	Leu 310	Phe	Pro	Glu	Gly	Asn 315	Pro	Ala	Lys	Ile	Asn 320
Leu	Lys	Arg	Pro	Pro 325	Thr	Ala	Gly	Ser	Gln 330	Phe	Lys	Ala	Ser	Val 335	Ala
Thr	Leu	Met	Lys 340	Asn	Leu	Gln	Thr	Xaa 345		Pro	Asn	Tyr	Ile 350	Arg	Cys
Ile	Lys	Pro 355	Asn	Asp	Lys	Lys	Ala 360	Ala	His	Ile	Phe	Asn 365	Glu	Ala	Leu
Val	Cys 370	His	Gln	Ile	Arg	Туг 375	Leu	Gly	Leu	Leu	Glu 380	Asn	Val	Arg	Val
Arg 385	Arg	Ala	Gly	Tyr	Ala 390	Phe	Arg	Gln	Ala	Tyr 395	Glu	Pro	Суѕ	Leu	Glu 400
Arg	Tyr	Lys	Met	Leu 405	Cys	Lys	Gln	Thr	Trp 410	Pro	His	Trp	Lys	Gly 415	Pro
Ala	Arg	Ser	Gly 420	Val	Glu	Val	Leu	Phe 425	Asn	Glu	Leu	Glu	Ile 430	Pro	Val
Glu	Glu	Туг 435	Ser	Phe	Gly	Arg	Ser 440	Lys	Ile	Phe	Ile	Arg 445	Asn	Pro	Arg
	Leu 450	Phe	Lys	Leu	Glu	Asp 455		Arg	Lys		Arg 460	Leu	Glu	Asp	Leu
Ala 465	Thr	Leu	Ile	Gln	Lys 470	Ile	Tyr	Arg	Gly	Trp 475	Lys	Cys	Arg	Thr	His 480
Phe	Leu	Leu	Met	Lys 485	Lys	Ser	Gln	Ile	Val 490	Ile	Ala	Ala	Trp	Tyr 495	Arg
Arg	Tyr	Ala	Gln 500	Gln	Lys	Arg	Tyr	Gln 505	Gln	Thr	Lys	Ser	Ser 510	Ala	Leu
Val	Ile	Gln 515	Ser	Tyr	Ile	Arg	Gly 520	Trp	Lys	Ala	Arg	Lys 525	Ile	Leu	Arg

Glu Leu Lys His Gln Lys Arg Cys Lys Glu Ala Val Thr Thr Ile Ala 530 535 540

Ala Tyr Trp His Gly Thr Gln Xaa Xaa Xaa Lys Asn Gln Glu Ile Leu 545 550 560

Gln Ser Gln Cys Trp Lys Arg Lys Ser 565

<210> 1584

<211> 267

<212> PRT

<213> Homo sapiens

<400> 1584

Arg Val Asp Pro Arg Val Arg Ile Leu Gly Ala Gly Glu Glu Ala Gly
1 5 10 15

Ser Pro Ser Leu His Val Arg Asp Leu Thr Val Glu Met Ala Ala Gln 20 25 30

Lys Ile Asn Glu Gly Leu Glu His Leu Ala Lys Ala Glu Lys Tyr Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

Lys Thr Gly Phe Leu Lys Trp Lys Pro Asp Tyr Asp Ser Ala Ala Ser 50 55 60

Glu Tyr Gly Lys Ala Ala Val Ala Phe Lys Asn Ala Lys Gln Phe Glu 65 70 75 80

Gln Ala Lys Asp Ala Cys Leu Arg Glu Ala Val Ala His Glu Asn Asn 85 90 95

Arg Ala Leu Phe His Ala Ala Lys Ala Tyr Glu Gln Ala Gly Met Met
100 105 110

Leu Lys Glu Met Gln Lys Leu Pro Glu Ala Val Gln Leu Ile Glu Lys 115 120 125

Ala Ser Met Met Tyr Leu Glu Asn Gly Thr Pro Asp Thr Ala Ala Met 130 135 140

Ala Leu Glu Arg Ala Gly Lys Leu Ile Glu Asn Val Asp Pro Glu Lys 145 150 155 160

Ala Val Gln Leu Tyr Gln Gln Thr Ala Asn Val Phe Glu Asn Glu Glu
165 170 175

Arg Leu Arg Gln Ala Val Glu Leu Leu Gly Lys Ala Ser Arg Leu Leu 180 185 Val Arg Gly Arg Arg Phe Asp Glu Ala Ala Leu Ser Ile Gln Lys Glu 200 Lys Asn Ile Tyr Lys Glu Ile Glu Asn Tyr Pro Thr Cys Tyr Lys Lys 210 215 220 Thr Ile Ala Gln Val Leu Val His Leu His Arg Asn Asp Tyr Val Ala 225 230 235 Ala Glu Arg Cys Val Arg Glu Ser Tyr Ser Ile Pro Gly Phe Asn Gly 245 250 Ser Glu Asp Cys Ala Ala Leu Gly Thr Ala Ser 260 <210> 1585 <211> 214 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1585 Xaa Xaa Xaa Gln Thr Ser Pro Val Leu Cys Asn Xaa Pro Arg Arg His 1 5 10 Arg Ala Pro Trp Pro Ser Tyr Asn Asp Glu Asp Ile Tyr Leu Phe Asn

25

Ser Ser His Ser Asp Gly Ala Gln Tyr Val Lys Arg Tyr Lys Gly His 35 40 45

Arg Asn Asn Ala Thr Val Lys Gly Val Asn Phe Tyr Gly Pro Lys Ser 50 55 60

Glu Phe Val Val Ser Gly Ser Asp Cys Gly His Ile Phe Leu Trp Glu
65 70 75 80

Lys Ser Ser Cys Gln Ile Ile Gln Phe Met Glu Gly Asp Lys Gly Gly 85 90 95

Val Val Asn Cys Leu Glu Pro His Pro His Leu Pro Val Leu Ala Thr
100 105 110

Ser Gly Leu Asp His Asp Val Lys Ile Trp Ala Pro Thr Ala Glu Ala 115 120 125

Ser Thr Glu Leu Thr Gly Leu Lys Asp Val Ile Lys Lys Asn Lys Arg 130 135 140

Glu Arg Asp Glu Asp Ser Leu His Gln Thr Asp Leu Phe Asp Ser His 145 150 155 160

Met Leu Trp Phe Leu Met His His Leu Arg Gln Arg Arg His His Arg 165 170 175

Arg Trp Arg Glu Pro Gly Val Gly Ala Thr Asp Ala Asp Ser Asp Glu 180 185 190

Ser Pro Ser Ser Ser Asp Thr Ser Asp Glu Glu Glu Gly Pro Asp Arg 195 200 205

Val Gln Cys Met Pro Ser 210

<210> 1586

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1586

Gln Ile Thr Pro Asn Lys Xaa Gly His Arg Glu Ser Ala Arg Arg Pro

1 10 15 Val Ile Gln Gly Pro Phe Leu Leu Asp Val Lys Glu Ser Trp Val Lys 25 Cys Gly Cys Asn Leu Asn Gln Leu Val Leu Val Ile Cys Phe Cys Pro 40 Leu Cys Phe Leu Leu Ser Asn Ala Lys Cys Val Phe Cys Ser His Glu 50 Leu Lys His Lys Lys Met His Glu Thr Leu 70 <210> 1587 <211> 412 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (296) <223> Xaa equals any of the naturally occurring L-amino acids Ser Gly Thr His His Phe Ser Cys Val Leu Gly Ser Phe Arg Val Ser Ala Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu Arg Pro Leu Ser 25 Arg His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser Ala Ala Ala Ile 35 40 Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr Arg Ser Ser Ala Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr Phe Gly Thr Asn Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val Arg Thr Glu Glu 85 Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu Lys Glu Asn Thr 100 105 Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys Val Glu Leu Ser

120

Thr	Val 130	Asn	Val	Arg	Thr	Thr 135	Lys	Pro	Pro	Lys	Arg 140	Arg	Pro	Leu	Lys
Ser 145	Leu	Glu	Ala	Thr	Leu 150	Gly	Arg	Leu	Arg	Arg 155	Ala	Thr	Glu	Tyr	Ala 160
Pro	Lys	Lys	Arg	11e 165	Glu	Pro	Leu	Ser	Pro 170	Glu	Leu	Val	Ala	Ala 175	Ala
ser	Ala	Val	Ala 180	Asp	Ser	Leu	Pro	Phe 185	Asp	Lys	Gln	Thr	Thr 190	Lys	Ser
Glu	Leu	Leu 195	Ser	Gln	Leu	Gln	Gln 200	His	Glu	Glu	Glu	Ser 205	Arg	Ala	Gln
Arg	Asp 210	Ala	Lys	Arg	Pro	Lys 215	Ile	Ser	Phe	Ser	Asn 220	Ile	Ile	Ser	Asp
Met 225	Lys	Val	Ala	Arg	Ser 230	Ala	Thr	Ala	Arg	Val 235	Arg	Ser	Arg	Pro	Glu 240
Leu	Arg	Ile	Gln	Phe 245	Asp	Glu	Gly	Tyr	Asp 250	Asn	Tyr	Pro	Gly	Gln 255	Glu
Lys	Thr	Asp	Asp 260	Leu	Lys	Lys	Arg	Lys 265	Asn	Ile	Phe	Thr	Gly 270	Lys	Arg
Leu	Asn	11e 275	Phe	Asp	Met	Met	Ala 280	Val	Thr	Lys	Glu	Ala 285	Pro	Glu	Thr
Asp	Thr 290	Ser	Pro	Ser	Leu	Trp 295	Xaa	Val	Glu	Phe	Ala 300	Lys	Gln	Leu	Ala
Thr 305	Val	Asn	Glu	Gln	Pro 310	Leu	Gln	Asn	Gly	Phe 315	Glu	Glu	Leu	Ile	Gln 320
Trp	Thr	Lys	Glu	Gly 325	Lys	Leu	Trp	Glu	Phe 330	Pro	Ile	Asn	Asn	Glu 335	Ala
Gly	Phe	Asp	Asp 340	Asp	Gly	Ser	Glu	Phe 345	His	Glu	His	Ile	Phe 350	Leu	Glu
Lys	His	Leu 355	Glu	Ser	Phe	Pro	Lys 360	Gln	Gly	Pro	Ile	Arg 365	His	Phe	Met
Glu	Leu 370	Val	Thr	Cys	Gly	Leu 375	Ser	Lys	Asn	Pro	Tyr 380	Leu	Ser	Val	Lys
Gln 385	Lys	Val	Glu	His	Ile 390	Glu	Trp	Phe	Arg	Asn 395	Tyr	Phe	Asn	Glu	Lys 400

Lys Asp Ile Leu Lys Glu Ser Asn Ile Gln Phe Asn 405 410

<210> 1588

<211> 44

<212> PRT

<213> Homo sapiens

<400> 1588

Ala Ile His Ser Leu Gln Gln Phe Asp Lys Ile Tyr Phe Cys Glu Gln l 5 10 15

Lys Leu Arg His Leu His Phe Leu Pro Met Trp Ser Leu Gln Thr Trp 20 25 30

Glu Thr Ile His Glu Tyr Leu Tyr Cys Met Val Ile $35 \hspace{1cm} 40$

<210> 1589

<211> 214

<212> PRT

<213> Homo sapiens

<400> 1589

Val Gly Glu Thr Gln His Ala Leu Arg Pro Leu Cys Lys Gln His Pro 1 5 10 15

Val Pro Pro Ser Ser Pro Arg Pro Ser Glu Glu Met Val Lys Met Val 20 25 30

Leu Ser Arg Pro Cys His Pro Asp Asp Gln Phe Thr Thr Ser Ile Leu 35 40 45

Arg His Trp Cys Met Lys His Asp Glu Leu Leu Ala Glu His Ile Lys 50 60

Ser Leu Leu Ile Lys Asn Asn Ser Leu Pro Arg Lys Arg Gln Ser Leu 65 70 75 80

Arg Ser Ser Ser Lys Leu Ala Gln Leu Thr Leu Glu Gln Ile Leu 85 90 95

Glu His Leu Asp Asn Leu Arg Leu Asn Leu Thr Asn Thr Lys Gln Asn 100 105 110

Phe Phe Ser Gln Thr Pro Ile Leu Gln Ala Leu Gln His Val Gln Ala 115 120 125

Ser Cys Asp Glu Ala His Lys Met Lys Phe Ser Asp Leu Phe Ser Leu 130 Ala Glu Glu Tyr Glu Asp Ser Ser Thr Lys Pro Pro Lys Ser Arg Arg 145 150 155 Lys Ala Ala Leu Ser Ser Pro Arg Ser Arg Lys Asn Ala Thr Gln Pro 165 170 Pro Asn Ala Glu Glu Glu Ser Gly Ser Ser Ser Ala Ser Glu Glu Glu 185 Asp Thr Lys Pro Lys Pro Thr Lys Arg Lys Arg Lys Gly Ser Ser Ala 195 200 Val Gly Ser Asp Ser Asp 210 <210> 1590 <211> 200 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1590 Lys Met His Ile Leu His Ala Asp Ile Lys Pro Asp Asn Ile Leu Val Asn Glu Ser Lys Thr Ile Leu Lys Leu Cys Xaa Phe Gly Ser Ala Ser 30 His Val Ala Asp Asn Asp Ile Thr Pro Tyr Leu Val Ser Arg Phe Tyr 40 Arg Ala Pro Glu Ile Ile Ile Gly Lys Ser Tyr Asp Tyr Gly Ile Asp Met Trp Ser Val Gly Cys Thr Leu Tyr Glu Leu Tyr Thr Gly Lys Ile 75 Leu Phe Pro Gly Lys Thr Asn Asn His Met Leu Lys Leu Ala Met Asp

90

Leu Lys Gly Lys Met Pro Asn Lys Met Ile Arg Lys Gly Val Phe Lys

100 105 110

Asp Gln His Phe Asp Gln Asn Leu Asn Phe Met Tyr Ile Glu Val Asp 115 120 125

Lys Val Thr Glu Arg Glu Lys Val Thr Val Met Ser Thr Ile Asn Pro 130 135 140

Thr Lys Asp Leu Leu Ala Asp Leu Ile Gly Cys Gln Arg Leu Pro Glu 145 150 155 160

Asp Gln Arg Lys Lys Val His Gln Leu Lys Asp Leu Leu Asp Gln Ile 165 170 175

Leu Met Leu Asp Pro Ala Lys Arg Ile Ser Ile Asn Gln Ala Leu Gln 180 185 190

His Ala Phe Ile Gln Glu Lys Ile 195 200

<210> 1591

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1591

Val Thr Leu Ala Arg Ser Leu Gln Ser Arg Pro Val Ala Met Ser Ala 1 5 10 15

Asp Val Thr Ser Ser Leu Ala Ala Phe Gly Glu Gly Trp Gly Val Arg

Glu Leu Ser Asp His Ser Ser Pro Arg Pro Leu Leu Gly Leu Ala Arg 35 40 45

Arg Ala Pro Arg Val Asp Pro Pro Ala Thr Gly Val Phe Ser Pro Leu 50 55 60

Leu Pro Pro Ser Gly Leu Met Arg Gln Arg Gly Gly Cys Gly Ala Cys
65 70 75 80

Leu Gly Arg Thr Glu Leu Ser Leu Gly Lys Thr Tyr Phe Val Asn Lys 85 90 95

Trp Asn Thr Trp Leu Tyr Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys 100 105 110

Lys Ser Arg

```
<210> 1592
<211> 66
<212> PRT
<213> Homo sapiens
<400> 1592
Val Cys Cys Cys Lys Lys Ser Pro Met Cys Ile Thr Asn Ser Glu Tyr
Phe Leu Arg Leu Lys Lys Thr Gly Val Thr Ser Arg Tyr Cys Cys Val
                                 25
Met Val Thr Leu Thr Lys Arg His Gln Pro Leu Arg Val Leu Tyr Cys
                            40
Lys Ala Gln Ile Thr Phe Val Cys Tyr Thr Leu Ile Gly Glu Leu Lys
Val Ile
 65
<210> 1593
<211> 91
<212> PRT
<213> Homo sapiens
<400> 1593
Glu Ser Leu Trp Ala Phe Cys Leu Ser Leu Leu Glu Arg Leu Ala Cys
Cys Ser Leu Leu Tyr Pro Glu Val Cys Leu Trp Asp Phe Ser Pro Val
```

Ala Val Glu Thr Arg Arg Pro Thr Leu Phe Glu Thr Gln Met Leu Leu 35 40 45

Ser Leu Ala Ser Pro Ser Leu Ser Ser Pro Asn Glu Pro Thr Phe Cys 50 60

Thr Ser Thr Arg Met Pro Gly Arg Leu Gly Pro Gln Arg Leu Leu Phe 65 70 75 80

Gln Asn Leu Trp Lys Pro Arg Leu Asn Val Pro 85 90

<210> 1594 <211> 442 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1594 Leu Glu Gln Glu Leu Gly Asp Gly Trp Gly His Ser Asp Leu His Lys 10 Ala Leu Leu Cys Arg Xaa Pro Pro Leu Pro Glu Pro Asp Ala Met Ser Ser Lys Gly Ser Val Val Leu Ala Tyr Ser Gly Gly Leu Asp Thr Ser Cys Ile Leu Val Trp Leu Lys Glu Gln Gly Tyr Asp Val Ile Ala Tyr Leu Ala Asn Ile Gly Gln Lys Glu Asp Phe Glu Glu Ala Arg Lys Lys Ala Leu Lys Leu Gly Ala Lys Lys Val Phe Ile Glu Asp Val Ser Arg Glu Phe Val Glu Glu Phe Ile Trp Pro Ala Ile Gln Ser Ser Ala Leu 105 Tyr Glu Asp Arg Tyr Leu Leu Gly Thr Ser Leu Ala Arg Pro Cys Ile 115 120 Ala Arg Lys Gln Val Glu Ile Ala Gln Arg Glu Gly Ala Lys Tyr Val Ser His Gly Ala Thr Gly Lys Gly Asn Asp Gln Val Arg Phe Glu Leu 150 155 Ser Cys Tyr Ser Leu Ala Pro Gln Ile Lys Val Ile Ala Pro Trp Arg 165 170 Met Pro Glu Phe Tyr Asn Arg Phe Lys Gly Arg Asn Asp Leu Met Glu Tyr Ala Lys Gln His Gly Ile Pro Ile Pro Val Thr Pro Lys Asn Pro

Trp	Ser 210	Met	Asp	Glu	Asn	Leu 215	Met	His	Ile	Ser	Tyr 220	Glu	Ala	Gly	Ile
Leu 225	Glu	Asn	Pro	Lys	Asn 230	Gln	Ala	Pro	Pro	Gly 235	Leu	Tyr	Thr	Lys	Thr 240
Gln	Asp	Pro	Ala	Lys 245	Ala	Pro	Asn	Thr	Pro 250	Asp	Ile	Leu	Glu	11e 255	Glu
Phe	Lys	Lys	Gly 260	Val	Pro	Val	Lys	Val 265	Thr	Asn	Val	Lys	Asp 270	Gly	Thr
Thr	His	Gln 275	Thr	Ser	Leu	Glu	Leu 280	Phe	Met	туг	Leu	Asn 285	Glu	Val	Ala
Gly	Lys 290	His	Gly	Val	Gly	Arg 295	Ile	Asp	Ile	Val	Glu 300	Asn	Arg	Phe	Ile
Gly 305	Met	Lys	Ser	Arg	Gly 310	Ile	Tyr	Glu	Thr	Pro 315	Ala	Gly	Thr	Ile	Leu 320
Tyr	His	Ala	His	Leu 325	Asp	Ile	Glu	Ala	Phe 330	Thr	Met	Asp	Arg	Glu 335	Val
Arg	Lys	Ile	Lys 340	Gln	Gly	Leu	Gly	Leu 345	Lys	Phe	Ala	Glu	Leu 350	Val	Tyr
Thr	Gly	Phe 355	Trp	His	Ser	Pro	Glu 360	Cys	Glu	Phe	Val	Arg 365	His	Cys	Ile
Ala	Lys 370	Ser	Gln	Glu	Arg	Val 375	Glu	Gly	Lys	Val	Gln 380	Val	Ser	Val	Leu
Lys 385	Gly	Gln	Val	Туг	Ile 390	Leu	Gly	Arg	Glu	Ser 395	Pro	Leu	Ser	Leu	Туг 400
Asn	Glu	Glu	Leu	Val 405	Ser	Met	Asn	Val	Gln 410	Gly	Asp	Tyr	Glu	Pro 415	Thr
Asp	Ala	Thr	Gly 420	Phe	Ile	Asn	Ile	Asn 425	Ser	Leu	Arg	Leu	Lys 430	Glu	Tyr
His	Arg	Leu	Gln	Ser	Lys	Val	Thr	Ala	Lys						

<210> 1595

<211> 456

<212> PRT

<213> Homo sapiens

<400> 1595	0	5) -			_			_		9	
Phe Gly Thr 1	ser Gir		eu Leu	Pro	Leu 10	Pro	Ala	Lys	Met	15	ASP
Met Glu Asp	Asp Phe	Met C	/s Asp	Asp 25	Glu	Glu	Asp	Tyr	Asp 30	Leu	Glu
Tyr Ser Glu 35	Asp Ser	Asn Se	er Glu 40	Pro	Asn	Val	Asp	Leu 45	Glu	Asn	Gln
Tyr Tyr Asn 50	Ser Lys		eu Lys 55	Glu	Asp	Asp	Pro 60	Lys	Ala	Ala	Leu
Ser Ser Phe 65	Gln Lys	70	eu Glu	Leu	Glu	Gly 75	Glu	Lys	Gly	Glu	Trp 80
Gly Phe Lys	Ala Leu 85	_	ln Met	Ile	Lys 90	Ile	Asn	Phe	Lys	Leu 95	Thr
Asn Phe Pro	Glu Met	Met As	sn Arg	Туг 105	Lys	Gln	Leu	Leu	Thr 110	Tyr	Ile
Arg Ser Ala 115	Val Thr	Arg As	n Tyr 120	Ser	Glu	Lys	Ser	Ile 125	Asn	Ser	Ile
Leu Asp Tyr 130	Ile Ser		er Lys 35	Gln	Met	Asp	Leu 140	Leu	Gln	Glu	Phe
Tyr Glu Thr 145	Thr Lev	Glu Al 150	la Leu	Lys	Asp	Ala 155	Lys	Asn	Asp	Arg	Leu 160
Trp Phe Lys	Thr Asr	_	ys Leu	Gly	Lys 170	Leu	туг	Leù	Glu	Arg 175	Glu
Glu Tyr Gly	Lys Leu 180	Gln Ly	ys Ile	Leu 185	Arg	Gln	Leu	His	Gln 190	Ser	Cys
Gln Thr Asp 195	Asp Gly	Glu As	sp Asp 200	Leu	Lys	Lys	Gly	Thr 205	Gln	Leu \	Leu
Glu Ile Tyr 210	Ala Leu	Glu II 21		Met	Tyr	Thr	Ala 220	Gln	Lys	Asn -	Asn
Lys Lys Leu 225	Lys Ala	Leu Ty 230	yr Glu	Gln	Ser	Leu 235	His	Ile	Lys	Ser	Ala 240
Ile Pro His	Pro Leu 245		et Gly	Val	11e 250	Arg	Glu	Cys	Gly	Gly 255	Lys
Met His Leu	Arg Glu	Gly G	lu Phe	Glu	Lys	Ala	His	Thr	Asp	Phe	Phe

260 265 270 Glu Ala Phe Lys Asn Tyr Asp Glu Ser Gly Ser Pro Arg Arg Thr Thr 280 Cys Leu Lys Tyr Leu Val Leu Ala Asn Met Leu Met Lys Ser Gly Ile 295 Asn Pro Phe Asp Ser Gln Glu Ala Lys Pro Tyr Lys Asn Asp Pro Glu 305 310 315 320 Ile Leu Ala Met Thr Asn Leu Val Ser Ala Tyr Gln Asn Asn Asp Ile 325 330 Thr Glu Phe Glu Lys Ile Leu Lys Thr Asn His Ser Asn Ile Met Asp 345 Asp Pro Phe Ile Arg Glu His Ile Glu Glu Leu Leu Arg Asn Ile Arg 355 360 365 Thr Gln Val Leu Ile Lys Leu Ile Lys Pro Tyr Thr Arg Ile His Ile 375 Pro Phe Ile Ser Lys Glu Leu Asn Ile Asp Val Ala Asp Val Glu Ser 390 395 Leu Leu Val Gln Cys Ile Leu Asp Asn Thr Ile His Gly Arg Ile Asp 405 Gln Val Asn Gln Leu Leu Glu Leu Asp His Gln Lys Arg Gly Gly Ala 425 Arg Tyr Thr Ala Leu Asp Lys Trp Thr Asn Gln Leu Asn Ser Leu Asn 440 445 Gln Ala Val Val Ser Lys Leu Ala 450 455 <210> 1596 <211> 375 <212> PRT <213> Homo sapiens

<220>

<221> SITE

<222> (176)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1596

Ser 1	Phe	Gly	Glu	Arg 5	Ala	Pro	Ser	Thr	Arg 10	Ser	Gly	Asp	Pro	Leu 15	Val
Ala	Val	Leu	Pro 20	Thr	Arg	Thr	Arg	Val 25	Pro	Gln	Ala	Ser	Arg 30	Cys	Pro
Ala	Gly	Ser 35	Ser	Cys	Pro	Thr	Pro 40	Gly	Ala	Arg	Pro	Pro 45	Ala	Ser	Pro
Gly	Pro 50	Leu	Pro	Arg	Pro	Ser 55	Ser	Arg	Arg	Ala	Arg 60	Ser	Met	Ala	Pro
Pro 65	Gln	Val	Leu	Ala	Phe 70	Gly	Leu	Leu	Leu	Ala 75	Ala	Ala	Thr	Ala	Thr 80
Phe	Ala	Ala	Ala	Gln 85	Glu	Glu	Cys	Val	Cys 90	Glu	Asn	Tyr	Lys	Leu 95	Ala
Val	Asn	Cys	Phe 100	Val	Asn	Asn	Asn	Arg 105	Gln	Cys	Gln	Cys	Thr 110	Ser	Val
Gly	Ala	Gln 115	Asn	Thr	Val	Ile	Cys 120	Ser	Lys	Leu	Ala	Ala 125	Lys	Cys	Leu
	130					135					Gly 140				
Pro 145	Glu	Gly	Ala	Leu	Gln 150	Asn	Asn	Asp	Gly	Leu 155	Tyr	Asp	Pro	Asp	Cys 160
Asp	Glu	Ser	Gly	Leu 165	Phe	Lys	Ala	Lys	Gln 170	Cys	Asn	Gly	Thr	Ser 175	Xaa
			180					185			Thr		190		
		195					200				Trp	205			
	210					215					Ser 220				
Thr 225	Ala	Leu	Gln	Lys	Glu 230	Ile	Thr	Thr	Arg	Туг 235	Gln	Leu	Asp	Pro	Lys 240
				245					250		Ile			255	
Val	Gln	Asn	Ser 260	Ser	Gln	Lys	Thr	Gln 265	Asn	Asp	Val	Asp	Ile 270	Ala	Asp

Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His 280

Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu Asp Leu Asp 290 295 300

Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe 305 310 315 320

Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile Val Val Val 325 330 335

Val Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile Ser Arg Lys 340 345 350

Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu Met Gly Glu 355 360 365

Met His Arg Glu Leu Asn Ala 370 375

<210> 1597

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1597

Ala Leu Gly Pro Gln Ala Ser Pro Leu Gln Ser Leu Ala Ala Ser Leu 1 5 10 15

Asp Ala Glu Pro Ser Ser Ala Ala Val Pro Asp Gly Phe Pro Ala Gly
20 25 30

Pro Thr Val Ser Pro Arg Arg Leu Ala Arg Pro Pro Gly Leu Glu Glu 35 40 45

Ala Leu Ser Ala Leu Gly Leu Gln Gly Glu Arg Asp Thr Pro Gly Thr 50 55 60

Ser Ser Pro Lys Ser Trp Xaa Gly Ser Arg Glu Arg Gln Lys His Ser 65 70 75 80

Val Gly Glu

```
<210> 1598
 <211> 103
 <212> PRT
 <213> Homo sapiens
 <400> 1598
 Gln Pro Glu Val Pro Asp Arg Arg Cys Val Ile His Arg Arg Arg
 Tyr Gly Ser Ser Thr Glu Ala His Ala Lys Leu Ser Thr Met Ala Ser
                                  25
 Ser Thr Val Pro Val Ser Ala Ala Gly Ser Ala Asn Glu Thr Pro Glu
          35
 Ile Pro Asp Asn Val Gly Asp Trp Leu Arg Gly Val Tyr Arg Phe Ala
 Thr Asp Arg Asn Asp Phe Arg Arg Asn Leu Ile Leu Asn Leu Gly Leu
                     70
                                         75
 Phe Ala Ala Gly Val Trp Leu Ala Arg Asn Leu Ser Asp Ile Asp Leu
                  85
                                     90
Met Ala Pro Gln Pro Gly Val
             100
 <210> 1599
 <211> 154
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (125)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (135)
 <223> Xaa equals any of the naturally occurring L-amino acids
```

Arg Arg Thr Tyr Tyr Gly Lys Thr Trp Asn Cys Arg Ala Arg Tyr Leu

10

5

<400> 1599

Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Asp Trp Gly Gly 25 Gly Gly Leu Ala Arg Pro Gly Leu Ala Cys Gln Gly Ala Gly Gly 40 Gly Ser Ser Thr Met Ser Leu Gln Tyr Gly Ala Glu Glu Thr Pro Leu 55 Ala Gly Ser Tyr Gly Ala Ala Asp Ser Phe Pro Lys Asp Phe Gly Tyr Gly Val Glu Glu Glu Glu Glu Ala Ala Ala Gly Gly Val 90 Gly Ala Gly Ala Gly Gly Gly Cys Gly Pro Gly Gly Ala Asp Ser Ser 100 105 Lys Pro Arg Ile Leu Leu Met Gly Thr Pro Ala Gln Xaa Lys Phe Leu 120 His Pro Glu Ser Gly Val Xaa Ile Lys Met Phe Asn Gln Arg Asp Pro 135 140 Leu Phe Leu Gly Asn Tyr Gln Thr Arg Phe 145 150 <210> 1600 <211> 108 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

Gly Cys Ser Phe Lys Trp Gly Leu Thr Gly Asn Val Thr Leu Ser Arg

<221> SITE <222> (68)

<400> 1600

1 10 15 Asp Val Arg Glu Val Asp Pro Xaa Gln Gly Xaa Pro Gly Arg Gly Thr 25 Gly Cys Ala Leu Pro Gln Ser Glu Asn Leu Leu Tyr Val Val Arg Lys Glu Gln Gly Asp Gln Ala Glu Ser Trp Ala Gly Val Glu Trp Lys Glu Arg Arg Leu Xaa Arg Thr Gly Gly Gly Pro Trp Leu Leu Ser 70 Glu Met Gly Thr Thr Gly Gly Phe Glu Gln Arg Ser Ala Leu Ile Asp Leu Tyr Phe Ala Arg Val Ile Leu Ala Ala Ile Leu <210> 1601 <211> 253 <212> PRT <213> Homo sapiens <400> 1601 Ala Pro Arg Ser Pro Arg Gly Arg Cys Gly Gly Thr Arg Ala Glu Ala Ala Ala Ala Thr Trp Ala Ala Ala Gly Pro Arg Arg Ala Val Arg Met Ser Gly Trp Ala Asp Glu Arg Gly Glu Gly Asp Gly Arg Ile Tyr Val Gly Asn Leu Pro Thr Asp Val Arg Glu Lys Asp Leu Glu Asp 55 Leu Phe Tyr Lys Tyr Gly Arg Ile Arg Glu Ile Glu Leu Lys Asn Arg 65 70 His Gly Leu Val Pro Phe Ala Phe Val Arg Phe Glu Asp Pro Arg Asp Ala Glu Asp Ala Ile Tyr Gly Arg Asn Gly Tyr Asp Tyr Gly Gln Cys 105

Arg Leu Arg Val Glu Phe Pro Arg Thr Tyr Gly Gly Arg Gly Gly Trp

120

Pro Arg Gly Gly Arg Asn Gly Pro Pro Thr Arg Arg Ser Asp Phe Arg 130 135 140

Val Leu Val Ser Gly Leu Pro Pro Ser Gly Ser Trp Gln Asp Leu Lys 145 150 155 160

Asp His Met Arg Glu Ala Gly Asp Val Cys Tyr Ala Asp Val Gln Lys 165 170 175

Asp Gly Val Gly Met Val Glu Tyr Leu Arg Lys Glu Asp Met Glu Tyr 180 185 190

Ala Leu Arg Lys Leu Asp Asp Thr Lys Phe Arg Ser His Glu Gly Glu
195 200 205

Thr Ser Tyr Ile Arg Val Tyr Pro Glu Arg Ser Thr Ser Tyr Gly Tyr 210 215 220

Ser Arg Ser Arg Ser Gly Ser Arg Gly Arg Asp Ser Pro Tyr Gln Ser 225 230 235 240

Arg Gly Ser Pro His Tyr Phe Ser Pro Phe Arg Pro Tyr 245 250

<210> 1602

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1602

Pro Arg Ala Ala Arg Pro Pro Ala Met Glu Pro Gly Pro Asp Gly Pro 1 5 10 15

Ala Ala Ser Gly Pro Ala Ala Ile Arg Glu Gly Trp Phe Arg Glu Thr
20 25 30

Cys Ser Leu Trp Pro Gly Gln Ala Leu Ser Leu Gln Val Glu Gln Leu 35 40 45

Leu His His Arg Arg Ser Arg Tyr Gln Asp Ile Leu Val Phe Arg Ser 50 55 60

Lys Thr Tyr Gly Asn Val Leu Val Leu Asp Gly Val Ile Gln Cys Thr 65 70 75 80

Glu Arg Asp Glu Phe Ser Tyr Gln Glu Met Ile Ala Asn Leu Pro Leu 85 90 95 Cys Ser His Pro Asn Pro Arg Lys Val Leu Ile Ile Gly Gly Asp 100 105 110

Gly Gly Val Leu Arg Glu Val Val Lys His Pro Ser Val Glu Ser Val
115 120 125

Val Gln Cys Glu Ile Asp Glu Asp Val Ile Gln Val Ser Lys Lys Phe 130 135 140

Leu Pro Gly Met Ala Ile Gly Tyr Ser Ser Ser Lys Leu Thr Leu His 145 150 155 160

Val Gly Asp Gly Phe Glu Phe Met Lys Gln Asn Gln Asp Ala Phe Asp 165 170 175

Val Ile Ile Thr Asp Ser Ser Asp Pro Met Gly Pro Ala Glu Ser Leu 180 185 190

Phe Lys Glu Ser Tyr Tyr Gln Leu Met Lys Thr Ala Leu Lys Glu Asp 195 200 205

Gly Val Leu Cys Cys Gln Gly Glu Cys Gln Trp Leu His Leu Asp Leu 210 215 220

Ile Lys Glu Met Arg Gln Phe Cys Gln Ser Leu Phe Pro Val Val Ala 225 230 235 240

Tyr Ala Tyr Cys Thr Ile Pro Thr Tyr Pro Ser Gly Gln Ile Gly Phe 245 250 255

Met Leu Cys Ser Lys Asn Pro Ser Thr Asn Phe Gln Glu Pro Val Gln 260 265 270

Pro Leu Thr Gln Gln Gln Val Ala Gln Met Gln Leu Lys Tyr Tyr Asn 275 280 285

Ser Asp Val His Arg Ala Ala Phe Val Leu Pro Glu Phe Ala Arg Lys 290 295 300

Ala Leu Asn Asp Val Ser 305 310

<210> 1603

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1603 Val Asn Val Ser Gly Phe Val Gln Gly Thr Cys Lys Gly Phe Gly Ser Met Val Arg Xaa Glu Arg Gln Glu Leu Glu Xaa Met Leu Leu Xaa Lys 20 25 Ser Arg Asp Ile Asn Phe Gly Val Thr 35 <210> 1604 <211> 132 <212> PRT <213> Homo sapiens <400> 1604 Ser Ala Trp Arg Ser Pro Asn Thr Ala Val Gln Pro Ala Ala Cys Pro 10 Lys Gln Cys Asn Pro Glu Thr Arg Pro Val Glu Lys Lys Ile Arg Ser 25 Ala Leu Pro Thr Lys Thr Val Lys Pro Val Glu Asn Lys Asp Asp Asp 40 45 Asp Ser Ile Ala Asp Phe Leu Asn Ser Asp Glu Glu Glu Asp Arg Val 55 Ser Leu Gln Asn Leu Lys Asn Leu Gly Glu Ser Ala Thr Leu Arg Ser 75 Leu Leu Leu Asn Pro His Leu Arg Gln Leu Met Val Asn Leu Asp Gln 85 90

Gly Glu Asp Lys Ala Lys Leu Met Arg Ala Tyr Met Gln Glu Pro Leu

105

```
Phe Val Glu Phe Ala Asp Cys Cys Leu Gly Ile Val Glu Pro Ser Gln
        115
                            120
Asn Glu Glu Ser
    130
<210> 1605
<211> 326
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (285)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (290) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (298) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (306) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1605 Pro Arg Ile His Leu Glu Asn Val Ser Glu Asp Glu Ile Asn Arg Leu Leu Gly Met Val Val Asp Val Glu Asn Leu Phe Met Ser Xaa Xaa Lys 20 25 Glu Glu Asp Thr Asp Thr Lys Gln Val Tyr Phe Tyr Leu Phe Lys Leu Leu Arg Lys Cys Ile Leu Gln Met Thr Arg Pro Val Val Glu Gly Ser 55 Leu Gly Ser Pro Pro Phe Glu Lys Pro Asn Ile Glu Gln Gly Val Leu 65 70 75 Asn Phe Val Gln Tyr Lys Phe Ser His Leu Ala Pro Arg Glu Arg Gln 85 90 Thr Met Phe Glu Leu Ser Lys Met Phe Leu Leu Cys Leu Asn Tyr Trp Lys Leu Glu Xaa Pro Ala Gln Phe Arg Gln Arg Ser Gln Ala Glu Asp 120 Val Ala Thr Tyr Lys Val Asn Tyr Thr Arg Trp Leu Cys Tyr Cys His 130 135 Val Pro Gln Ser Cys Asp Ser Leu Pro Arg Tyr Glu Thr Thr His Val 150 155 Phe Gly Arg Ser Leu Leu Arg Ser Ile Phe Thr Val Thr Arg Arg Gln 170 Leu Leu Glu Lys Phe Xaa Val Glu Lys Asp Lys Leu Val Pro Glu Lys 180 185

Arg Thr Ser Ser Ser Leu Thr Ser Pro Ser Lys Ala Pro Ser Gly Leu

195 200 205 Pro Gly Phe Gly Pro Lys Phe Thr Ser Ser Leu Leu Ser Pro Phe Phe 215 210 220 Gln Xaa Gly Phe Leu Asp Trp Ser Leu Leu Ser Leu His Gly Pro Phe Gly Ile Trp Ala Ser Thr Trp Gln Thr Cys Pro Trp Pro Arg Ser Asn 245 250 Leu Leu Val Leu Val Trp Gly Trp Gln Ile Pro Val His Ala Gly Gly 260 265 Gly Asp Leu Trp Gly Lys Leu Ser Asn Leu Gly Val Xaa Leu Xaa His 280 Ala Xaa Leu Arg Gly Asp Thr Ala Gly Xaa Pro Gly Gln Leu Gln Ser 290 300 Val Xaa Gly Leu Phe Pro Ala Pro Pro Ser Ser Ala Pro Ala Trp Val 305 315 310 Gly Ala Ala Thr Ala Pro 325 <210> 1606 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (32) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

Phe Gly Thr Trp Lys Lys Lys Lys Thr Leu Arg Asp Ser Leu Cys

10

5

<221> SITE <222> (70)

Glu Glu Leu Leu Thr Glu Ser Leu Ser Thr Phe Leu Pro Pro Asp Xaa 20 25 30

Glu Asp Xaa Gly Val Ser Val Leu Ser Pro Leu Leu Phe Pro
35 40 45

Asn Gln Gly Leu Cys His Tyr Cys Pro Ser Gln Leu Ser Met Gln Glu 50 55 60

Asp Arg Val Ala Trp Xaa Ser Tyr Pro Cys Pro Ser Pro Lys Gly Ser 65 70 75 80

Thr Arg Lys Leu Lys Arg Leu Lys Lys Lys Arg Val Cys Ser 85 90

<210> 1607

<211> 246

<212> PRT

<213> Homo sapiens

<400> 1607

Ala Ala Ala Trp Cys Ala Arg Leu Ala Gly Asp Gly Ile Arg Arg Thr
1 5 10 15

Trp Thr Pro Pro Glu Trp Lys Pro Lys Gln Glu Leu Leu Leu Leu Arg
20 25 30

Gly Cys Arg Ser Arg Arg Glu Pro Pro Asp Arg Arg Gln Ser Glu Glu
35 40 45

Gly Ala Thr Arg Leu Gly Lys Met Thr Gln Phe Leu Pro Pro Asn Leu 50 60

Leu Ala Leu Phe Ala Pro Arg Asp Pro Ile Pro Tyr Leu Pro Pro Leu 65 70 75 80

Glu Lys Leu Pro His Glu Lys His His Asn Gln Pro Tyr Cys Gly Ile 85 90 95

Ala Pro Tyr Ile Arg Glu Phe Glu Asp Pro Arg Asp Ala Pro Pro Pro 100 105 110

Thr Arg Ala Glu Thr Arg Glu Glu Arg Met Glu Arg Lys Arg Arg Glu 115 120 125

Lys Ile Glu Arg Arg Gln Gln Glu Val Glu Thr Glu Leu Lys Met Trp 130 135 140

 Asp Pro His Asn Asn Pro 145
 Asn Asn Pro 150
 Asn Ala Gln Gly Asp Ala Phe Lys Thr Leu 150
 Leu 150
 Leu 160

 Phe Val Ala Arg 165
 Val Asn Tyr Asp 170
 Thr Thr Glu Ser Lys Leu Arg 175
 Leu Arg 175
 Arg 175

 Glu Phe Glu Val 180
 Tyr Gly Pro 185
 Lys Arg 180
 His Met Val Tyr Ser 190
 Thr Ser 185

Lys Arg Ser Gly Lys Pro Arg Gly Tyr Ala Phe Ile Glu Tyr Glu His 195' 200 205

Glu Arg Asp Met His Ser Ala Tyr Lys His Ala Asp Gly Lys Lys Ile 210 215 220

Asp Gly Arg Arg Val Leu Val Asp Val Glu Arg Gly Arg Thr Val Lys 225 230 235 240

Gly Trp Arg Pro Gly Gly

<210> 1608

<211> 65

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1608

Gly Pro Ser Leu Ser Leu Met Phe Lys Gln Ser Leu Ser Met Lys Leu
1 5 10 15

Gly Gly Asp Arg Val Ser Cys Gln Phe Leu Thr Ala Thr Ser His Gln 20 25 30

Trp Leu His Ser Val Ser Leu Thr Gln His Met Ala Gln Glu Cys Cys 35 40 45

His Pro Ser Val Phe Tyr Ser Ser Asn Pro Arg Xaa Trp Xaa Leu Arg 50 55 60

Asp 65

<210> 1609

<211> 213

<212> PRT

<213> Homo sapiens

<400> 1609

Glu Ser Gln Glu Asp Lys Glu Pro Lys Glu Glu Thr Pro Ala Gly Gly
1 5 10 15

Arg Ala Ala Ala Asp Pro Gly Trp Gly Ser Gln Pro Ala Gln Gln 20 25 30

Arg Ala Arg Lys Ala Ser Lys Glu Glu Gly Ala Arg Arg Gly Val
35 40 45

Arg Gly Leu Gly Val Arg Pro Leu Arg Pro Leu Gly Asn Arg Glu Trp 50 55 60

Thr Ala Glu Gln Thr Val Gly Leu Ser Gly Val Trp Gly Asn Thr Gly 65 70 75 80

Asn Ser Ser Gln Glu Gly Tyr Pro Pro Tyr Trp Leu Pro Pro Pro Ala 85 90 95

Ala Gln Leu Cys Pro Pro Glu Pro Ser Val Ser Leu Asn Pro Ser Leu 100 105 110

Phe Phe Pro Thr Ser Thr Phe Trp Thr Phe Pro Leu Pro Phe Pro Val

Phe Lys Ile Ser Val Thr Thr Pro Gly Thr Phe Ala Ala Asp Leu Gly 130 135 140

Val Leu Phe Lys Arg Lys Ser Gly Gly Trp Glu Ser Leu Gly Glu Leu 145 150 155 160

Arg Leu Arg Val Glu Gly Val Cys Pro Ser Leu Gly Val Leu Val Pro 165 170 175

Val Arg Gly Val Tyr Gly Leu Phe Pro Ser Pro Ser Leu Ile Phe Phe 180 185 190

Phe Phe Leu Lys Lys Ala Lys Met Arg Ile Asn Thr Ser Arg His Val 195 200 205

Lys Lys Lys Lys

```
<210> 1610
<211> 916
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (365)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (524)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (687)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (806)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1610
Arg Pro Thr Arg Pro Ala Gly Ser Thr Asp Cys His Gly Ala Ala Ala
                                    10
Gly Val Arg Ala Thr Leu Val Leu Glu Leu Leu Asp Thr Asp Gly Leu
             20
Val Val Cys Ala Arg Gly Leu Gly Ala Asp Arg Leu Leu Tyr His Phe
                             40
Leu Gln Leu His Cys His Pro Ala Cys Leu Val Leu Val Leu Asn Thr
                        55
Gln Pro Ala Glu Glu Tyr Phe Ile Asn Gln Leu Lys Ile Glu Gly
 65
Val Glu His Leu Pro Arg Arg Val Thr Asn Glu Ile Thr Ser Asn Ser
                                     90
Arg Tyr Glu Val Tyr Thr Gln Gly Gly Val Ile Phe Ala Thr Ser Arg
            100
                                105
```

Ile	Leu	Val 115	Val	Asp	Phe	Leu	Thr 120	Asp	Arg	Ile	Pro	Ser 125	Asp	Leu	Ile
Thr	Gly 130	Ile	Leu	Val	Tyr	Arg 135	Ala	His	Arg	Ile	Ile 140	Glu	Ser	Cys	Gln
Glu 145	Ala	Phe	Ile	Leu	Arg 150	Leu	Phe	Arg	Gln	Lys 155	Asn	Lys	Arg	Gly	Phe 160
				165					170		Asp			175	7
			180					185			Arg		190		
		195					200				Leu	205			-
	210					215					Pro 220				
225					230					235	Cys				240
				245					250	_	Leu			255	
			260					265			His		270	_	
		275					280				Leu	285			
	290					295					Gln 300		_	-	
305					310					315	Thr		_		320
				325					330					335	Phe
			340		-			345			Asp		350		
		355					360				Lys	365			
Thr	Lys 370	Lys	Glu	Leu	Val	Leu 375	Glu	Ser	Asn	Pro	Lys 380	Trp	Glu	Ala	Leu

Thr	Glu	(7a)	Tau	Tva	G1	T1 -	61		61		T	C1	c	G1	
385	GIU	Vai	Leu	гàг	390	iie	GIu	АТА	GIU	395	rys	GIU	ser	GIU	Ala 400
Leu	Gly	Gly	Pro	Gly 405	Gln	Val	Leu	Ile	Cys 410		Ser	Asp	Asp	Arg 415	Thr
Cys	Ser	Gln	Leu 420	Arg	Asp	Tyr	Ile	Thr 425	Leu	Gly	Ala	Glu	Ala 430	Phe	Leu
Leu	Arg	Leu 435	Tyr	Arg	Lys	Thr	Phe 440	Glu	Lys	Asp	Ser	Lys 445	Ala	Glu	Glu
Val	Trp 450	Met	Lys	Phe	Arg	Lys 455	Glu	Asp	Ser	Ser	Lys 460	Arg	Ile	Arg	Lys
Ser 465	His	Lys	Arg	Pro	Lys 470	Asp	Pro	Gln	Asn	Lys 475	Glu	Arg	Ala	Ser	Thr 480
Lys	Glu	Arg	Thr	Leu 485	Lys	Lys	Lys	Lys	Arg 490	Lys	Leu	Thr	Leu	Thr 495	Gln
Met	Val	Gly	Lys 500	Pro	Glu	Glu	Leu	Glu 505	Glu	Glu	Gly	Asp	Val 510	Glu	Glu
Gly	Tyr	Arg 515	Arg	Glu	Ile	Ser	Ser 520	Ser	Pro	Glu	Xaa	Cys 525	Pro	Glu	Glu
Ile	Lys 530	His	Glu	Glu	Phe	Asp 535	Val	Asn	Leu	Ser	Ser 540	Asp	Ala	Ala	Phe
Gly 545	Ile	Leu	Lys	Glu	Pro 550	Leu	Thr	Ile	Ile	His 555	Pro	Leu	Leu	Gly	Cys 560
Ser	Asp	Pro	Tyr	Ala 565	Leu	Thr	Arg	Val	Leu 570	His	Glu	Val	Glu	Pro 575	Arg
Tyr	Val	Val	Leu 580	Tyr	Asp	Ala	Glu	Leu 585	Thr	Phe	Val	Arg	Gln 590	Leu	Glu
Ile	Tyr	Arg 595	Ala	Ser	Arg	Pro	Gly 600	Lys	Pro	Leu	Arg	Val 605	Tyr	Phe	Leu
Ile	Tyr 610	Gly	Gly	Ser	Thr	Glu 615	Glu	Gln	Arg	Tyr	Leu 620	Thr	Ala	Leu	Arg
Lys 625	Glu	Lys	Glu	Ala	Phe 630	Glu	Lys	Leu	Ile	Arg 635	Glu	Lys	Ala	Ser	Met 640
Val	Val	Pro	Glu	Glu 645	Arg	Glu	Gly	Arg	Asp 650	Glu	Thr	Asn	Leu	Asp 655	Leu

Val Arg Gly Thr Ala Ser Ala Asp Val Ser Thr Asp Thr Arg Lys Ala Gly Gly Gln Glu Gln Asn Gly Thr Gln Gln Ser Ile Val Val Xaa Met 680 Arg Glu Phe Arg Ser Glu Leu Pro Ser Leu Ile His Arg Arg Asp Ile 695 Asp Ile Glu Pro Val Thr Leu Glu Val Gly Asp Tyr Ile Leu Thr Pro 710 Glu Met Cys Val Glu Arg Lys Ser Ile Ser Asp Leu Ile Gly Ser Leu 725 730 Asn Asn Gly Arg Leu Tyr Ser Gln Cys Ile Ser Met Ser Arg Tyr Tyr 740 745 Lys Arg Pro Val Leu Leu Ile Glu Phe Asp Pro Ser Lys Pro Phe Ser 760 Leu Thr Ser Arg Gly Ala Leu Phe Gln Glu Ile Ser Ser Asn Asp Ile 775 Ser Ser Lys Leu Thr Leu Leu Thr Leu His Phe Pro Arg Leu Arg Ile 785 790 795 Leu Trp Cys Pro Ser Xaa His Ala Thr Ala Glu Leu Phe Glu Glu Leu 805 810 Lys Gln Ser Lys Pro Gln Pro Asp Ala Ala Thr Ala Leu Ala Ile Thr 825 Ala Asp Ser Glu Thr Leu Pro Glu Ser Glu Lys Tyr Asn Pro Gly Pro 835 840 Gln Asp Phe Leu Leu Lys Met Pro Gly Val Asn Ala Lys Asn Cys Arg 855 Ser Leu Met His His Val Lys Asn Ile Ala Glu Leu Ala Ala Leu Ser 870 875 Gln Asp Glu Leu Thr Ser Ile Leu Gly Asn Ala Ala Asn Ala Lys Gln 885 Leu Tyr Asp Phe Ile His Thr Ser Phe Ala Glu Val Val Ser Lys Gly 900 905 910 Lys Gly Lys Lys

<210> 1611 <211> 197

<212> PRT

<213> Homo sapiens

<400> 1611

Gly Gly Gly Pro Ala Pro Gly Asp Ile Val Phe Cys Arg Asn Gln Pro 1 5 10 15

Lys Asp Glu Asp Ala Asp Met Met Lys Tyr Ile Glu Thr Glu Leu Lys
20 25 30

Lys Arg Lys Gly Ile Val Glu His Glu Glu Gln Lys Val Lys Pro Lys 35 40 . 45

Asn Ala Glu Asp Cys Leu Tyr Glu Leu Pro Glu Asn Ile Arg Val Ser 50 55

Ser Ala Lys Lys Thr Glu Glu Met Leu Ser Asn Gln Met Leu Ser Gly 65 70 75 80

Ile Pro Glu Val Asp Leu Gly Ile Asp Ala Lys Ile Lys Asn Ile Ile 85 90 95

Ser Thr Glu Asp Ala Lys Ala Arg Leu Leu Ala Glu Gln Gln Asn Lys
100 105 110

Lys Lys Asp Ser Glu Thr Ser Phe Val Pro Thr Asn Met Ala Val Asn 115 120 125

Tyr Val Gln His Asn Arg Phe Tyr His Glu Glu Leu Asn Ala Pro Ile 130 135 140

Arg Arg Asn Lys Glu Glu Pro Lys Ala Arg Pro Leu Arg Val Gly Asp 145 150 155 160

Thr Glu Lys Pro Glu Pro Glu Arg Ser Pro Pro Asn Arg Lys Arg Pro 165 170 175

Ala Asn Glu Lys Ala Thr Asp Asp Tyr His Tyr Glu Lys Phe Lys Lys 180 185 190

Met Asn Arg Arg Tyr 195

<210> 1612 <211> 476

<212> PRT <213> Homo sapiens <400> 1612 Pro Arg Val Arg Gly Asp Val Gly Met Ala Gly Val Ala Ile Asp Thr Val Glu Asp Thr Lys Ile Leu Phe Asp Gly Ile Pro Leu Glu Lys Met 25 Ser Val Ser Met Thr Met Asn Gly Ala Val Ile Pro Val Leu Ala Asn 40 Phe Ile Val Thr Gly Glu Glu Gln Gly Val Pro Lys Glu Lys Leu Thr 55 Gly Thr Ile Gln Asn Asp Ile Leu Lys Glu Phe Met Val Arg Asn Thr Tyr Ile Phe Pro Pro Glu Pro Ser Met Lys Ile Ile Ala Asp Ile Phe Glu Tyr Thr Ala Lys His Met Pro Lys Phe Asn Ser Ile Ser Ile Ser Gly Tyr His Met Gln Glu Ala Gly Ala Asp Ala Ile Leu Glu Leu Ala 120 Tyr Thr Leu Ala Asp Gly Leu Glu Tyr Ser Arg Thr Gly Leu Gln Ala 135 Gly Leu Thr Ile Asp Glu Phe Ala Pro Arg Leu Ser Phe Phe Trp Gly 145 150 155 Ile Gly Met Asn Phe Tyr Met Glu Ile Ala Lys Met Arg Ala Gly Arg 170 Arg Leu Trp Ala His Leu Ile Glu Lys Met Phe Gln Pro Lys Asn Ser 185 Lys Ser Leu Leu Leu Arg Ala His Cys Gln Thr Ser Gly Trp Ser Leu 195 200 Thr Glu Gln Asp Pro Tyr Asn Asn Ile Val Arg Thr Ala Ile Glu Ala Met Ala Ala Val Phe Gly Gly Thr Gln Ser Leu His Thr Asn Ser Phe

230

245

Asp Glu Ala Leu Gly Leu Pro Thr Val Lys Ser Ala Arg Ile Ala Arg

235

Asn Thr Gln Ile Ile Gln Glu Glu Ser Gly Ile Pro Lys Val Ala 260 265 270

Asp Pro Trp Gly Gly Ser Tyr Met Met Glu Cys Leu Thr Asn Asp Val 275 280 285

Tyr Asp Ala Ala Leu Lys Leu Ile Asn Glu Ile Glu Glu Met Gly Gly 290 295 300

Met Ala Lys Ala Val Ala Glu Gly Ile Pro Lys Leu Arg Ile Glu Glu 305 310 315 320

Cys Ala Ala Arg Arg Gln Ala Arg Ile Asp Ser Gly Ser Glu Val Ile 325 330 335

Val Gly Val Asn Lys Tyr Gln Leu Glu Lys Glu Asp Ala Val Glu Val 340 345 350

Leu Ala Ile Asp Asn Thr Ser Val Arg Asn Arg Gln Ile Glu Lys Leu 355 360 365

Lys Lys Ile Lys Ser Ser Arg Asp Gln Ala Leu Ala Glu Arg Cys Leu 370 375 380

Ala Ala Leu Thr Glu Cys Ala Ala Ser Gly Asp Gly Asn Ile Leu Ala 385 390 395 400

Leu Ala Val Asp Ala Ser Arg Ala Arg Cys Thr Val Gly Glu Ile Thr
405 410 415

Asp Ala Leu Lys Lys Val Phe Gly Glu His Lys Ala Asn Asp Arg Met 420 425 430

Val Ser Gly Ala Tyr Arg Gln Glu Phe Gly Glu Ser Lys Glu Ile Thr 435 440 445

Ser Ala Ile Lys Arg Val His Lys Phe Met Glu Arg Glu Gly Arg Ser 450 455 460

Ser Ser Ser Cys Ser Lys Asn Gly Thr Arg Trp Pro 465 470 475

<210> 1613

<211> 319

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (84) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (289) <223> Xaa equals any of the naturally occurring L-amino acids Gln His His Arg Ala Ala His Leu Lys Trp Ile Phe Val Gly Gly Lys Gly Gly Val Gly Lys Thr Thr Cys Ser Cys Ser Leu Ala Val Gln Leu 25 Ser Lys Gly Arg Glu Ser Val Leu Ile Ile Ser Thr Asp Pro Ala His 40 Asn Ile Ser Asp Ala Phe Asp Gln Lys Phe Ser Lys Val Pro Thr Lys Val Lys Gly Tyr Asp Asn Leu Phe Ala Met Glu Ile Asp Pro Ser Leu 75 Gly Val Ala Xaa Xaa Pro Asp Glu Phe Phe Glu Glu Asp Asn Met Leu 90 85 Ser Met Gly Lys Lys Met Met Gln Glu Ala Met Ser Ala Phe Pro Gly 100 105 110 Ile Asp Glu Ala Met Ser Tyr Ala Glu Val Met Arg Leu Val Lys Gly 120 Met Asn Phe Ser Val Val Val Phe Asp Thr Ala Pro Thr Gly His Thr 135 Leu Arg Leu Leu Asn Phe Pro Thr Ile Val Glu Arg Gly Leu Gly Arg 145 155 150 Leu Met Gln Ile Lys Asn Gln Ile Ser Pro Phe Ile Ser Gln Met Cys 170 Asn Met Leu Gly Leu Gly Asp Met Asn Ala Asp Gln Leu Ala Ser Lys 185

Leu Glu Glu Thr Leu Pro Val Ile Arg Ser Val Ser Glu Gln Phe Lys 195 200 205

Asp Pro Glu Gln Thr Thr Phe Ile Cys Val Cys Ile Ala Glu Phe Leu 210 215 220

Ser Leu Tyr Glu Thr Glu Arg Leu Ile Gln Glu Leu Ala Lys Cys Lys 225 230 235 240

Ile Asp Thr His Asn Ile Ile Val Asn Gln Leu Val Phe Pro Asp Pro 245 250 255

Glu Lys Pro Cys Lys Met Cys Glu Ala Arg His Lys Ile Gln Ala Lys 260 265 270

Tyr Leu Asp Gln Met Glu Asp Leu Tyr Glu Asp Phe His Ile Val Lys 275 280 285

Xaa Pro Leu Leu Pro His Glu Val Arg Gly Ala Asp Lys Val Asn Thr 290 295 300

Phe Ser Ala Leu Leu Glu Pro Tyr Lys Pro Pro Ser Ala Gln 305 310 315

<210> 1614

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1614

His Glu Glu Arg Gly Gln Gly Arg Phe Leu Lys Met Ala Ala Leu Lys

1 5 10 15

Ala Leu Val Ser Gly Cys Gly Arg Leu Leu Arg Gly Leu Leu Ala Gly
20 25 30

Pro Ala Ala Thr Ser Trp Ser Arg Leu Pro Ala Arg Gly Phe Arg Glu 35 40 45

Val Val Glu Thr Gln Glu Gly Lys Thr Thr Ile Ile Glu Gly Arg Ile 50 60

Thr Ala Thr Pro Lys Glu Ser Pro Asn Pro Pro Asn Pro Ser Gly Gln 65 70 75 80

Cys Pro Ile Cys Arg Trp Asn Leu Lys His Lys Tyr Asn Tyr Asp Asp

Val Leu Leu Ser Gln Phe Ile Arg Pro His Gly Gly Met Leu Pro

100 105 110

Arg Lys Ile Thr Gly Leu Cys Gln Glu Glu His Arg Lys Ile Glu Glu
115 120 125

Cys Val Lys Met Ala His Arg Ala Gly Leu Leu Pro Asn His Arg Pro 130 135 140

Arg Leu Pro Glu Gly Val Val Pro Lys Ser Lys Pro Gln Leu Asn Arg 145 150 155 160

Tyr Leu Thr Arg Trp Ala Pro Gly Ser Val Lys Pro Ile Tyr Lys Lys 165 170 175

Gly Pro Arg Trp Asn Arg Val Arg Met Pro Val Gly Ser Pro Leu Leu 180 185 190

Arg Asp Asn Val Cys Tyr Ser Arg Thr Pro Trp Lys Leu Tyr His 195 200 205

<210> 1615

<211> 304

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (174)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1615

Pro Thr Arg Pro Arg Val His Leu Ala Thr Val Ser Ala Ser Ala Ala 1 5 10 15

Trp Asp Ala Leu Gly Leu Pro Val Arg Ser His Met Gln Gly Ser Thr 20 25 30

Arg Arg Met Gly Val Met Thr Asp Val His Arg Arg Phe Leu Gln Leu 35 40 45

Leu Met Thr His Gly Val Leu Glu Glu Trp Asp Val Lys Arg Leu Gln
50 60

Thr His Cys Tyr Lys Val His Asp Arg Asn Ala Thr Val Asp Lys Leu 65 70 75 80

Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu Glu Ser Leu Tyr Ile 85 90 95

Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly Arg Pro Ile Tyr Ala Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys Met Ala Thr Asp Phe 120 Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala Leu Glu Leu Ile Ile 130 Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn Ile Leu Asn Leu Val 150 155 Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys Glu Ala Xaa Gln Val 165 170 Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile Glu Lys Glu Gly Glu 185 Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met Glu Gln Tyr Ile Arg 200 Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn Ile Cys His Ser Leu 215 Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly Ile Arg Met His Leu 225 230 235 Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala Glu Pro Arg Cys Pro His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro Lys Val Phe Asp Pro 265 Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser Asn Lys Lys Ser Cys 275 280 Gly Pro Gly Ser Ile Ser His Arg Ala Leu Leu Arg Gly Trp Leu Pro 290 295 300

<210> 1616

<211> 223

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1616 Ala Glu Xaa Leu Gly Gly Pro Gly Xaa Ala Ser Gly Gly Glu Thr Ser Val Glu Arg Arg Thr Cys Ala Phe Asp Thr Leu Glu Ala Phe Leu 20 25 Ile Met Asp Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu 40 Thr Ala Tyr Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Arg Ala Thr 55 Ile Val Ser Leu Glu Asp Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu 65 70 75 Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu Leu 85 90 Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu 105 Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala Pro 120 Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln Ala 130 135 Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn Thr 150 155 Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro Leu 165 170 Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Gly Ser Leu 180 185 Thr Glu Ser Arg Gly Phe Arg Ile Gln Ile Ser Ser Leu Gln Glu Phe 195 200 205

Cys Lys Gly Pro Ser Ile Thr Xaa Ile Leu Tyr Phe Arg Glu Cys 210 215 220

<210> 1617

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1617

Val Lys Gln Tyr Leu Arg Thr Gly Tyr Lys Gln Tyr Phe Leu Lys Leu 1 5 . 10 15

Ser Pro Ile Phe Pro Pro Met Arg Pro Phe Gln Thr Gln Ile Ser His 20 25 30

Asn Arg Ala Arg Thr Ile Ile Thr Ser Pro Asp Ser Glu Pro Glu Cys $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Phe Pro Gln Asp Cys Val Ala Pro Asn Ala Leu Arg Ser Ile Val Gly 50 55 60

Glu Ser Cys His Trp Asp Ser Thr Ser Arg Pro Gly Asp Gln Ala Ser 65 70 75 80

Arg Ile Pro Leu Glu Thr Pro Pro Leu Phe His Tyr His Pro Ala Thr 85 90 95

Ser Ser Ser Ala Met Pro Trp Phe Pro Leu Glu Ser Ser Gln Ser Gln 100 105 110

Arg Arg Pro Pro Thr Thr Ser Lys Ala Ser Lys Val Leu Glu Ser Ala 115 120 125

Pro Arg Leu Asn Arg Ala Ser Ile Ser Ser 130 135

<210> 1618

<211> 388

<212> PRT

<213> Homo sapiens

<400> 1618

Ala Glu Ser Thr Ala Arg Val Cys Cys Pro Ser Pro Arg Tyr Ala Gln
1 5 10 15

Ser	Arg	Arg	ser 20	Pro	Ala	Trp	Gly	Glu 25	Gln	Ser	Asp	His	Arg 30	Pro	Gly
Ala	Ala	Arg 35	Arg	Asp	Ala	Arg	Cys 40	Ala	Leu	Cys	Pro	Arg 45	Ala	Pro	Thr
Ala	Pro 50	Ala	Ala	Ala	Ala	Glu 55	Ala	Gln	Arg	Glu	Asn 60	Ala	Pro	Pro	Arg.
Gly 65	Pro	Gly	Ala	Ala	Ser 70	Asp	Pro	Leu	Ala	Thr 75	Cys	Ala	Gln	Pro	Glu 80
Val	Ser	Ser	Glu	Arg 85	Arg	Ala	Gly	Gly	Gln 90	Arg	Gly	Val	Arg	Gly 95	Pro
Pro	Pro	Ala	Ala 100	Arg	Ala	Arg	Pro	Leu 105	Met	Ala	Ala	Ile	Arg 110	Lys	Lys
Leu	Val	Val 115	Val	Gly	Asp	Gly	Ala 120	Cys	Gly	Lys	Thr	Cys 125	Leu	Leu	Ile
Val	Phe 130	Ser	Lys	Asp	Glu	Phe 135	Pro	Glu	Val	Tyr	Val 140	Pro	Thr	Val	Phe
Glu 145	Asn	Tyr	Val	Ala	Asp 150	Ile	Glu	Val	Asp	Gly 155	Lys	Gln	Val	Glu	Leu 160
Ala	Leu	Trp	Asp	Thr 165	Ala	Gly	Gln	Glu	Asp 170	Tyr	Asp	Arg	Leu	Arg 175	Pro
Leu	Ser	Tyr	Pro 180	Asp	Thr	Asp	Val	Ile 185	Leu	Met	Cys	Phe	Ser 190	Val	Asp
Ser	Pro	Asp 195	Ser	Leu	Glu	Asn	Ile 200	Pro	Glu	Lys	Trp	Val 205	Pro	Glu	Val
Lys	His 210	Phe	Cys	Pro	Asn	Val 215	Pro	Ile	Ile	Leu	Val 220	Ala	Asn	Lys	Lys
Asp 225	Leu	Arg	Ser	Asp	Glu 230	His	Val	Arg	Thr	Glu 235	Leu	Ala	Arg	Met	Lys 240
Gln	Glu	Pro	Val	Arg 245	Thr	Asp	Asp	Gly	Arg 250	Ala	Met	Ala	Val	Arg 255	Ile
Gln	Ala	Tyr	Asp 260	Tyr	Leu	Glu	Cys	Ser 265	Ala	Lys	Thr	Lys	Glu 270	Gly	Val
Arg	Glu	Val 275	Phe	Glu	Thr	Ala	Thr 280	Arg	Ala	Ala	Ala	Glu 285	Ala	Leu	Arg

Leu Pro Glu Arg Leu His Gln Leu Leu Gln Gly Ala Met Arg Ala Ala 290 295 300

Pro Val Ala Pro Ala Pro Ala Gly Thr Ala Pro Pro Pro Gly Pro Val 315 320

Pro Arg Glu Pro Gly Glu Gly Glu Thr Arg Val Pro Gln Gly Pro His 325 330 335

Arg Pro Ala Trp His Leu Ser Ala Asp Ala Ser Gly Leu Arg Gln Asp 340 345 350

Leu Ala Trp Ala Pro Gly Ala Pro Ile Pro Val Ser Val Cys Val Gln 355 360 365

Leu Cys Cys Thr Gly Leu Gly Ser Pro Leu Ser Ala Lys Gly Pro Leu 370 375 380

Ser Met Leu Phe 385

<210> 1619

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1619

Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Gly Thr Arg 1 5 10 15

Gly Arg Thr Arg Gly Arg Glu Gly Arg Ser Leu Trp Arg Lys Met Ala
20 25 30

Ala Ala Trp Gly Ser Ser Leu Thr Ala Ala Thr Gln Arg Ala Val Thr 35 40 45

Pro Trp Pro Arg Gly Arg Leu Leu Thr Ala Ser Leu Gly Pro Gln Ala 50 55 60

Arg Arg Glu Ala Ser Ser Ser Pro Glu Ala Gly Glu Gly Gln Ile
65 70 75 80

Arg Leu Thr Asp Ser Cys Val Gln Arg Leu Leu Glu Ile Thr Glu Gly
85 90 95

Ser Glu Phe Leu Arg Leu Gln Val Glu Gly Gly Gly Cys Ser Gly Phe 100 105 110

Gln Tyr Lys Phe Ser Leu Asp Thr Val Ile Asn Pro Asp Asp Arg Val

115 120 125 Phe Glu Gln Gly Gly Ala Arq Val Val Asp Ser Asp Ser Leu Ala 135 Phe Val Lys Gly Ala Gln Val Asp Phe Ser Gln Glu Leu Ile Arg Ser 150 155 Ser Phe Gln Val Leu Asn Asn Pro Gln Ala Gln Gln Gly Cys Ser Cys 165 170 Gly Ser Ser Phe Ser Ile Lys Leu 180 <210> 1620 <211> 468 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1620 Xaa Ala Pro Xaa Gly Pro Pro Ala Pro Pro Ala Leu Pro Pro Ala Ala Ser Pro Gly Ala Pro Ala Arg Arg Pro Gly Gly Arg Ser Glu Glu Lys 20 Ile Ser Asp Ser Glu Gly Phe Lys Ala Asn Leu Ser Leu Leu Arg Arg 40 Pro Gly Glu Lys Thr Tyr Thr Gln Arg Cys Arg Leu Phe Val Gly Asn Leu Pro Ala Asp Ile Thr Glu Asp Glu Phe Lys Arg Leu Phe Ala Lys 65 70

Tyr Gly Glu Pro Gly Glu Val Phe Ile Asn Lys Gly Lys Gly Phe Gly

Phe Ile Lys Leu Glu Ser Arg Ala Leu Ala Glu Ile Ala Lys Ala Glu

85

90

			100					105					110		
Leu	Asp	Asp 115	Thr	Pro	Met	Arg	Gly 120	Arg	Gln	Leu	Arg	Val 125	Arg	Phe	Ala
Thr	His 130	Ala	Ala	Ala	Leu	Ser 135	Val	Arg	Asn	Leu	Ser 140	Pro	Tyr	Val	Ser
Asn 145	Glu	Leu	Leu	Glu	Glu 150	Ala	Phe	Ser	Gln	Phe 155	Gly	Pro	Ile	Glu	Arg 160
Ala	Val	Val	Ile	Val 165	Asp	Asp	Arg	Gly	Arg 170	Ser	Thr	Gly	Lys	Gly 175	Ile
Val	Glu	Phe	Ala 180	Ser	Lys	Pro	Ala	Ala 185	Arg	Lys	Ala	Phe	Glu 190	Arg	Cys
Ser	Glu	Gly 195	Val	Phe	Leu	Leu	Thr. 200	Thr	Thr	Pro	Arg	Pro 205	Val	Ile	Val
Glu	Pro 210	Leu	Glu	Gln	Leu	Asp 215	Asp	Glu	Asp	Gly	Leu 220	Pro	Glu	Lys	Leu
Ala 225	Gln	Lys	Asn	Pro	Met 230	Tyr	Gln	Lys	Glu	Arg 235	Glu	Thr	Pro	Pro	Arg 240
Phe	Ala	Gln	His	Gly 245	Thr	Phe	Glu	Tyr	Glu 250	Tyr	Ser	Gln	Arg	Trp 255	Lys
Ser	Leu	Asp	Glu 260	Met	Glu	Lys	Gln	Gln 265	Arg	Glu	Gln	Val	Glu 270	Lys	Asn
Met	Lys	Asp 275	Ala	Lys	Asp	Lys	Leu 280	Glu	Ser	Glu	Met	Glu 285	Asp	Ala	Tyr
His	Glu 290	His	Gln	Ala	Asn	Leu 295	Leu	Arg	Gln	Asp	Leu 300	Met	Arg	Arg	Gln
Glu 305	Glu	Leu	Arg	Arg	Met 310	Glu	Glu	Leu	His	Asn 315	Gln	Glu	Met	Gln	Lys 320
Arg	Lys	Glu	Met	Gln 325	Leu	Arg	Gln	Glu	Glu 330	Glu	Arg	Arg	Arg	Arg 335	Glu
Glu	Glu	Met	Met 340	Ile	Arg	Gln	Arg	Glu 345	Met	Glu	Glu	Gln	Met 350	Arg	Arg
Gln	Arg	Glu 355	Glu	Ser	Tyr	Ser	Arg 360	Met	Gly	Tyr	Met	Asp 365	Pro	Arg	Glu
Arg	Asp	Met	Arg	Met	Gly	Gly	Gly	Gly	Ala	Met	Asn	Met	Gly	Asp	Pro

370 375 380

Tyr Gly Ser Gly Gly Gln Lys Phe Pro Pro Leu Gly Gly Gly Gly Gly 385 390 395 400

Ile Gly Tyr Glu Ala Asn Pro Gly Val Pro Pro Ala Thr Met Ser Gly
405 410 415

Ser Met Met Gly Ser Asp Met Arg Thr Glu Arg Phe Gly Gln Gly Gly 420 425 430

Ala Gly Pro Val Gly Gly Gln Gly Pro Arg Gly Met Gly Pro Gly Thr
435 440 445

Pro Ala Gly Tyr Gly Arg Gly Arg Glu Glu Tyr Glu Gly Pro Asn Lys 450 455 460

Lys Pro Arg Phe 465

<210> 1621

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1621

Ala Pro Ala Pro Thr Ser Cys Ser Leu Lys Pro Cys Ile Gly His Pro 1 5 10 15

Val Pro Ser Ser Gly Tyr Ser Cys His Val Gly Pro Thr Leu Ser Cys
20 25 30

Gly Thr Lys Arg Gly Thr Gln His Gly Asn Leu Thr Pro Glu Arg Ser 35 40 45

Asp Val Trp Phe Ala Leu Gln Leu Asn Arg Lys Leu Arg Leu Gly Val 50 55 60

Gly Asn Arg Ala Ile Arg Thr Glu Lys Ile Ile Cys Arg Asp Val Ala 65 70 75 80

Arg Gly Tyr Glu Asn Val Pro Ile Pro Cys Val Lys Val Trp Met Gly 85 90 95

Ser Pro Ala Leu Arg Ile Thr Ser Thr Ser Gln Arg Thr Ala Arg Arg 100 105 110

Pro Pro

```
<210> 1622
<211> 399
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (397)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1622
Glu Val Cys His Gly Gly His Arg Gly Xaa Leu Gln Ser Trp Xaa Pro
Pro Arg Glu Ala Glu Ser Leu Gln Pro Met Thr Val Val Gly Thr Asp
                                 25
Tyr Val Phe His Asn Asp Thr Lys Val Val Phe Leu Ser Pro Ala Val
Pro Glu Glu Pro Glu Ala Tyr Asn Leu Thr Val Leu Ile Glu Met Asp
Gly His Arg Ala Leu Leu Arg Thr Glu Ala Gly Ala Phe Glu Tyr Val
Pro Asp Pro Thr Phe Glu Asn Phe Thr Gly Gly Val Lys Lys Gln Val
                                     90
Asn Lys Leu Ile His Ala Arg Gly Thr Asn Leu Asn Lys Ala Met Thr
           100
                                105
Leu Gln Glu Ala Glu Ala Phe Val Gly Ala Glu Arg Cys Thr Met Lys
                            120
Thr Leu Thr Glu Thr Asp Leu Tyr Cys Glu Pro Pro Glu Val Gln Pro
                        135
```

Pro 145	Pro	Lys	Arg	Arg	Gln 150	Lys	Arg	Asp	Thr	Thr 155	His	Asn	Leu	Pro	Glu 160
Phe	Ile	Val	Lys	Phe 165	Gly	Ser	Arg	Glu	Trp 170	Val	Leu	Gly	Arg	Val 175	Glu
Tyr	Asp	Thr	Arg 180	Val	Ser	Asp	Val	Pro 185	Leu	Ser	Leu	Ile	Leu 190	Pro	Leu
Val	Ile	Val 195	Pro	Met	Val	Val	Val 200	Ile	Ala	Val	Ser	Val 205	Tyr	Cys	Tyr
Trp	Arg 210	Lys	Ser	Gln	Gln	Ala 215	Glu	Arg	Glu	Tyr	Glu 220	Lys	Ile	Lys	Ser
Gln 225	Leu	Glu	Gly	Leu	Glu 230	Glu	Ser	Val	Arg	Asp 235	Arg	Cys	Lys	Lys	Glu 240
Phe	Thr	Asp	Leu	Met 245	Ile	Glu	Met	Glu	Asp 250	Gln	Thr	Asn	Asp	Val 255	His
Glu	Ala	Gly	11e 260	Pro	Val	Leu	Asp	Туг 265	Lys	Thr	Tyr	Thr	Asp 270	Arg	Val
Phe	Phe	Leu 275	Pro	Ser	Lys	Asp	Gly 280	Asp	Lys	Asp	Val	Met 285	Ile	Thr	Gly
Lys	Leu 290	Asp	Ile	Pro	Glu	Pro 295	Arg	Arg	Pro	Val	Val 300	Glu	Gln	Ala	Leu
Tyr 305	Gln	Phe	Ser	Asn	Leu 310	Leu	Asn	Ser	Lys	Ser 315	Phe	Leu	Ile	Asn	Phe 320
Ile	His	Thr	Leu	Glu 325	Asn	Gln	Arg	Glu	Phe 330	Ser	Ala	Arg	Ala	Lys 335	Val
Tyr	Phe	Ala	Ser 340	Leu	Leu	Thr	Val	Ala 345	Leu	His	Gly	Lys	Leu 350	Glu	Tyr
Tyr	Thr	Asp 355	Ile	Met	His	Thr	Leu 360	Phe	Leu	Glu	Leu	Leu 365	Glu	Gln	Tyr
Val	Val 370	Ala	Lys	Asn	Pro	Lys 375	Leu	Met	Leu	Arg	Arg 380	Ser	Glu	Thr	Val
Val 385	Glu	Arg	Met	Leu	Ser 390	Asn	Trp	Met	Ser	Ile 395	Leu	Xaa	Pro	Ile	

```
<211> 189
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1623
Ile Tyr Asp Phe Arg Thr Gly Met Arg Leu Lys Lys Glu Glu Lys Ser
                                    10
Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu Gly Asp Ala Ser
Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln Ile Ala Glu Leu
                            40
Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Gln Xaa Ala Leu Ala
     50
Arg Leu Asp Asp Glu Ile Leu Gln Lys Asn Asn Ala Leu Lys Lys Ile
Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu Asp Leu Asp Ser
Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys Arg Asp Leu Gly
           100
Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp Thr Leu Asp Ser
                            120
Thr Ala Thr Gln Glu Leu Arg Ala Lys Arg Glu Gln Glu Val Thr
                       135
Val Leu Lys Lys Ala Leu Asp Glu Glu Xaa Arg Ser His Glu Ala Gln
145
Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val Glu Glu Leu Lys
                165
                                    170
Gln Arg Ala Gly His Arg Ala His Thr Gly Pro Glu Glu
           180
                               185
```

<210> 1624 <211> 276 <212> PRT <213> Homo sapiens <400> 1624 Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro 5 10 Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala 40 Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val 50 55 Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys 70 75 Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly 105 Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln 120 Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser 135 Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser 145 150 155 Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala 165 170 Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly 185 Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val 195

Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn

Thr Met Lys Leu Gen Leu Ser Lys Arg Gln Glu Lys Val Ile Phe

215

210

225 230 235 240

Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn 245 250 255

Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser 260 265 270

Arg Pro Gly Ser 275

<210> 1625

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1625

Gln Ser Ala Val Gly Asn Thr Ala Thr Thr Leu Pro Trp Gln Gly Pro
1 5 10 15

Glu Ser Ile Ser Gly Gly Ala Ala His Val Cys Met Cys Cys Val Ser 20 25 30

Glu His Thr Arg Val His Thr His Thr His Val His Thr His Ala Leu 35 40 45

Ser Pro Leu Arg Gly Leu Glu Val Trp Leu Ser Pro Trp Gly Lys Val 50 55 60

Ser Ser Phe Ile Ser Leu Leu Gln Val Gly Val Pro Gly Val Arg Cys 65 70 75 80

Arg Gly His Ile Ala Gly Cys Pro Leu Phe Val Ala Pro Ile Lys Gly \$90\$

Pro His Leu Val Asp Thr Trp Leu Ser Val Trp Ser Leu Pro Gln Pro 100 105 110

Val Leu Val Thr Ile Thr Gly Leu Ala Phe Val Thr Met Met Thr Pro 115 120 125

Ala Cys Leu Ile Phe 130

<210> 1626

<211> 677

<212> PRT

```
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (339)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (538)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (544)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1626
Ser Ser Gly Met Ala Leu Ala Val Ala Ala Xaa Ala Glu Ala Gln Ala
                                     10
Ala Arg Pro Gln Trp Arg Leu Glu Pro Glu Arg Arg Arg Arg His
             20
Pro Gly Glu Phe Lys Met Ala Ala Gly Gly Thr Gly Gly Leu Arg Glu
Glu Gln Arg Tyr Gly Leu Ser Cys Gly Arg Leu Gly Gln Asp Asn Ile
                         55
Thr Val Leu His Val Lys Leu Thr Glu Thr Ala Ile Arg Ala Leu Glu
65
                                         75
                     70
Thr Tyr Gln Ser His Lys Asn Leu Ile Pro Phe Arg Pro Ser Ile Gln
                 85
                                     90
Phe Gln Gly Leu His Gly Leu Val Lys Ile Pro Lys Asn Asp Pro Leu
                                105
Asn Glu Val His Asn Phe Asn Phe Tyr Leu Ser Asn Val Gly Lys Asp
       115
                            120
Asn Pro Gln Gly Ser Phe Asp Cys Ile Gln Gln Thr Phe Ser Ser Ser
    130
                                            140
                        135
Gly Ala Ser Gln Leu Asn Cys Leu Gly Phe Ile Gln Asp Lys Ile Thr
```

145					150					155					160
Val	Cys	Ala	Thr	Asn 165	Asp	Ser	Tyr	Gln	Met 170	Thr	Arg	Glu	Arg	Met 175	Thr
Gln	Ala	Glu	Glu 180	Glu	Ser	Arg	Asn	Arg 185	Ser	Thr	Lys	Val	Ile 190	Lys	Pro
Gly	Gly	Pro 195	Tyr	Val	Gly	Lys	Arg 200	Val	Gln	Ile	Arg	Lys 205	Ala	Pro	Gln
Ala	Val 210	Ser	Asp	Thr	Val	Pro 215	Glu	Arg	Lys	Arg	Ser 220	Thr	Pro	Met	Asn
Pro 225	Ala	Asn	Thr	Ile	Arg 230	Lys	Thr	His	ser	Ser 235	Ser	Thr	Ile	Ser	Gln 240
Arg	Pro	Tyr	Arg	Asp 245	Arg	Val	Ile	His	Leu 250	Leu	Ala	Leu	Lys	Ala 255	Tyr
Lys	Lys	Pro	Glu 260	Leu	Leu	Ala	Arg	Leu 265	Gln	Lys	Asp	Gly	Val 270	Asn	Gln
Lys	Asp	Lys 275	Asn	Ser	Leu	Gly	Ala 280	Ile	Leu	Gln	Gln	Val 285	Ala	Asn	Leu
Asn	Ser 290	Lys	Asp	Leu	Ser	Tyr 295	Thr	Leu	Lys	Asp	Туг 300	Val	Phe	Lys	Glu
Leu 305	Gln	Arg	Asp	Trp	Pro 310	Gly	туr	Ser	Glu	11e 315	Asp	Arg	Arg	Ser	Leu 320
Glu	Ser	Val	Leu	Ser 325	Arg	Lys	Leu	Asn	Pro 330	Ser	Gln	Asn	Ala	Thr 335	Gly
Thr	Ser	Xaa	Ser 340	Glu	Ser	Pro	Val	Cys 345	Ser	Ser	Arg	Asp	Ala 350	Val	Ser
Ser	Pro	Gln 355	Lys	Arg	Leu	Leu	Asp 360	Ser	Glu	Phe	Ile	Asp 365	Pro	Leu	Met
Asn	Lys 370	Lys	Ala	Arg	Ile	Ser 375	His	Leu	Thr	Asn	Arg 380	Val	Pro	Pro	Thr
Leu 385	Asn	Gly	His	Leu	Asn 390	Pro	Thr	Ser	Glu	Lys 395	Ser	Ala	Ala	Gly	Leu 400
Pro	Leu	Pro	Pro	Ala 405	Ala	Ala	Ala	Ile	Pro 410	Thr	Pro	Pro	Pro	Leu 415	Pro
Ser	Thr	Tyr	Leu	Pro	Ile	Ser	His	Pro	Pro	Gln	Ile	Val	Asn	Ser	Asn

420 425 430 Ser Asn Ser Pro Ser Thr Pro Glu Gly Arg Gly Thr Gln Asp Leu Pro 440 Val Asp Ser Phe Ser Gln Asn Asp Ser Ile Tyr Glu Asp Gln Gln Asp 455 Lys Tyr Thr Ser Arg Thr Ser Leu Glu Thr Leu Pro Pro Gly Ser Val 465 470 475 Leu Leu Lys Cys Pro Lys Pro Met Glu Glu Asn His Ser Met Ser His 485 490 Lys Lys Ser Lys Lys Ser Lys Lys His Lys Glu Lys Asp Gln Ile 505 Lys Lys His Asp Ile Glu Thr Ile Glu Glu Lys Glu Glu Asp Leu Lys 520 Arg Glu Glu Glu Ile Ala Lys Leu Asn Xaa Ser Ser Pro Asn Ser Xaa 535 Gly Gly Val Lys Glu Asp Cys Thr Ala Ser Met Glu Pro Ser Ala Ile 550 555 Glu Leu Pro Asp Tyr Leu Ile Lys Tyr Ile Ala Ile Val Ser Tyr Glu 565 Gln Arg Gln Asn Tyr Lys Asp Asp Phe Asn Ala Glu Tyr Asp Glu Tyr Arg Ala Leu His Ala Arg Met Glu Thr Val Ala Arg Arg Phe Ile Lys 600 Leu Asp Ala Gln Arg Lys Arg Leu Ser Pro Gly Ser Lys Glu Tyr Gln 610 615 Asn Val His Glu Glu Val Leu Gln Glu Tyr Gln Lys Ile Lys Gln Ser 630 635 Ser Pro Asn Tyr His Glu Glu Lys Tyr Arg Cys Glu Tyr Leu His Asn 650 Lys Leu Ala His Ile Lys Arg Leu Ile Gly Glu Phe Asp Gln Gln Gln 660 665 Ala Glu Ser Trp Ser

675

```
<210> 1627
<211> 124
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
Gly Pro Trp Gly Gly Phe Glu Leu Ser Arg Leu Cys Pro Tyr Arg Leu
                                     10
Pro Arg His Thr Arg Ser Val Phe Pro Leu Ser Pro Pro Ser Arg Ala
Gly Pro Ser Gly Ile Glu Gly Ala Gly Ser Pro Arg Thr Arg Ala Gln
Lys Ser Pro Thr Gly Ser Cys Ile Phe Xaa Arg Thr Ile Pro Gly Ala
                         55
Leu Arg Gly Val Ser Gly Glu Thr Gly His Arg Gln Ser His Gly Pro
Pro Pro Lys Ala Gln Ala Pro Pro Ala Pro Pro His Pro Ser Ser Leu
                85
                                     90
Thr His Ala Ala Ser Pro Pro Pro Cys Arg Cys Xaa Gly Gln Ser Pro
           100
                              105
Val Arg Pro Lys Thr Gly Leu Val Pro Gly Xaa Ala
       115
                            120
```

<210> 1628 <211> 277 <212> PRT

<213> Homo sapiens <220> <221> SITE <222> (176) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1628 Thr His Val Val Arg His Ala Tyr Arg Ser Tyr Phe Thr Phe Ile Gly 5 10 Arg Val Ala Gly Leu Ala Val Phe His Gly Lys Leu Leu Asp Gly Phe Phe Ile Arg Pro Phe Tyr Lys Met Met Leu Gly Lys Gln Ile Thr Leu 40 Asn Asp Met Glu Ser Val Asp Ser Glu Tyr Tyr Asn Ser Leu Lys Trp 50 55 Ile Leu Glu Asn Asp Pro Thr Glu Leu Asp Leu Met Phe Cys Ile Asp Glu Glu Asn Phe Gly Gln Thr Tyr Gln Val Asp Leu Lys Pro Asn Gly 85 90 Ser Glu Ile Met Val Thr Asn Glu Asn Lys Arg Glu Tyr Ile Asp Leu 100 105 Val Ile Gln Trp Arg Phe Val Asn Arg Val Gln Lys Gln Met Asn Ala 120 Phe Leu Glu Gly Phe Thr Glu Leu Leu Pro Ile Asp Leu Ile Lys Ile 135 Phe Asp Glu Asn Glu Leu Glu Leu Met Cys Gly Leu Gly Asp Val 145 150 155 Asp Val Asn Asp Trp Arg Gln His Ser Ile Tyr Lys Asn Gly Tyr Xaa 165 170 Pro Asn His Pro Val Ile Gln Trp Phe Trp Lys Ala Val Leu Leu Met 185

195 200 205

Asp Ala Glu Lys Arg Ile Arg Leu Leu Gln Phe Val Thr Gly Thr Ser

Arg Val Pro Met Asn Gly Phe Ala Glu Leu Tyr Gly Ser Asn Gly Pro 210 215 220

Gln Leu Phe Thr Ile Glu Gln Trp Gly Ser Pro Glu Lys Leu Pro Arg

225 230 235 240 Ala His Thr Cys Phe Asn Arg Leu Asp Leu Pro Pro Tyr Glu Thr Phe 245 250 Glu Asp Leu Arg Glu Lys Leu Leu Met Ala Val Glu Asn Ala Gln Gly 265 Phe Glu Gly Val Asp 275 <210> 1629 <211> 135 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids Gly Ala Val Gly Gly Arg Xaa Gly Gly Arg Tyr Ala Gly Arg His Val Ser Arg Val Arg Ala Leu Tyr Lys Arg Val Leu Gln Leu His Arg Val 25 Leu Pro Pro Asp Leu Lys Ser Leu Gly Asp Gln Tyr Val Lys Asp Glu Phe Arg Arg His Lys Thr Val Gly Ser Asp Glu Ala Gln Arg Phe Leu 50 Gln Glu Trp Glu Val Tyr Ala Thr Ala Leu Leu Gln Gln Ala Asn Glu Asn Arg Gln Asn Ser Thr Gly Lys Ala Cys Phe Gly Thr Phe Leu Pro 90 Glu Glu Lys Leu Asn Asp Phe Arg Asp Glu Gln Ile Gly Gln Leu Gln 100 105 Glu Leu Met Gln Glu Ala Thr Lys Pro Asn Arg Gln Phe Ser Ile Ser

120

Glu Ser Met Lys Pro Lys Phe

125

```
<210> 1630
<211> 233
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (.33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (227)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1630
Met Cys Pro Ser Cys Ser Pro Cys Gly Met Asp Trp Val Val Glu Thr
Met Pro Gln Gly Val Cys Gly Met Ser Pro Ser Val Trp Ser Val Xaa
             20
                                 25
                                                      30
Xaa Glu Thr Val Arg Gly Leu Leu His His Pro Thr Leu Pro Asn
         35
                             40
```

Pro Tyr Thr Met Ala Val Ala Ala Arg Val Thr Ala Ala Thr Thr Val 50 55 60

Thr His Ile Thr Ala Phe Asp Pro Asp Ser Thr Gly Gln Gln Val Trp
65 70 75 80

Gln Asp Leu Gln Asp Gly Gln Leu Asp Ser Pro Thr Gly Gln Ser 85 90 95

Thr Pro Thr Gln Lys Gly Val Gly Ile Ala Gly Ala Val Cys Val Ser 100 105 110

Ser Lys Leu Arg Pro Arg Gly Gln Cys Arg Leu Glu Phe Ser Leu Ala 115 120 125

Trp Asp Met Pro Arg Ile Met Phe Gly Ala Lys Gly Gln Val His Tyr 130 135 140

Arg Arg Tyr Thr Arg Phe Phe Gly Gln Asp Gly Asp Ala Ala Pro Ala 145 150 155 160

Leu Ser His Tyr Ala Leu Cys Arg Tyr Ala Glu Trp Glu Glu Arg Ile 165 170 175

Ser Ala Trp Gln Ser Pro Val Leu Asp Asp Arg Ser Leu Pro Ala Trp 180 185 190

Tyr Lys Xaa Ala Leu Phe Asn Glu Leu Tyr Phe Leu Ala Asp Gly Gly
195 200 205

Thr Val Trp Leu Glu Val Leu Glu Asp Ile Gln Asp Lys Xaa Xaa Phe 210 215 220

Tyr Pro Xaa Arg Gly Gln Xaa Ala Tyr 225 . 230

<210> 1631

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (118) <223> Xaa equals any of the naturally occurring L-amino acids Trp Gly Pro Arg Leu Pro Pro Pro Xaa Lys Lys Ala Leu Leu Ala Leu 10 Lys Lys Gln Ser Ser Ser Ser Thr Thr Ser Gln Gly Gly Val Lys Arg Ser Leu Ser Glu Gln Pro Val Met Asp Thr Ala Thr Ala Thr Glu Gln 40 Ala Lys Gln Leu Val Lys Ser Gly Ala Ile Ser Ala Ile Lys Ala Glu 55 Thr Lys Asn Ser Gly Phe Lys Arg Ser Arg Thr Leu Glu Gly Lys Leu

Lys Asp Pro Glu Lys Gly Pro Val Pro Thr Phe Gln Pro Phe Gln Arg 90

Ser Ile Ser Ala Asp Asp Leu Gln Glu Ser Ser Arg Arg Pro Gln 100

Arg Lys Ser Leu Tyr Xaa Ser Ser Leu Ala Val Gln Asn Ser Pro Lys 120

Gly Cys His Arg Asp Lys Arg Thr Gln Ile Val Tyr Ser Asp Asp Val 135

Tyr Lys Glu Asn Leu Val Asp Gly Phe 145 150

<210> 1632

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1632

Pro Thr Arg Cys Gly Ala Ser Gly Ser Arg Pro Pro Ser Gly Ser Asp

Pro Ala Asn Gly Phe Gly Tyr Ile Phe Met Leu Gly Phe Ile Thr Arg 20

Pro Pro His Arg Phe Leu Ser Leu Leu Cys Pro Gly Leu Arg Ile Pro

Gln Leu Ser Val Leu Cys Ala Gln Pro Arg Pro Arg Ala Met Ala Ile 55 Ser Ser Ser Cys Glu Leu Pro Leu Val Ala Val Cys Gln Val Thr 70 Ser Thr Pro Asp Lys Gln Gln Asn Phe Lys Thr Cys Ala Glu Leu Val 85 90 Arg Glu Ala Arg Leu Gly Ala Cys Leu Ala Phe Leu Pro Glu Ala 105 Phe Asp Phe Ile Ala Arg Asp Pro Ala Glu Thr Leu His Leu Ser Glu 120 Pro Leu Gly Gly Lys Leu Leu Glu Glu Tyr Thr Gln Leu Ala Arg Glu 135 Cys Gly Leu Trp Leu Ser Leu Gly Gly Phe His Glu Arg Gly Gln Asp 155 150 Trp Glu Gln Thr Gln Lys Ile Tyr Asn Cys His Val Leu Leu Asn Ser 165 170 Lys Gly Ala Val Val Ala Thr Tyr Arg Lys Thr His Leu Cys Asp Val 180 185 Glu Ile Pro Gly Gln Gly Leu Cys Val Lys Ala Thr Leu Pro Cys Leu 200 Gly Pro Val Leu Ser His Leu Ser Ala His Gln Gln Ala Arg Leu Val 215

<210> 1633

<211> 668

<212> PRT

<213> Homo sapiens

<400> 1633

Thr Ile Asn Gly Val Ile Leu Ile Ser Val Phe Phe Ser Phe Phe 1 5 10 15

Leu His Pro Met Leu Ser Val Val Cys Val Val Gly Leu Ser Pro 20 25 30

Gly Gln Tyr Phe Tyr Phe Gln Glu Val Phe Pro Val Leu Ala Ala Lys

35 40 45 His Cys Ile Met Gln Ala Asn Ala Glu Tyr His Gln Ser Ile Leu Ala 55 Lys Gln Gln Lys Lys Phe Gly Glu Glu Ile Ala Arg Leu Gln His Ala Ala Glu Leu Ile Lys Thr Val Ala Ser Arg Tyr Asp Glu Tyr Val Asn 85 Val Lys Asp Phe Ser Asp Lys Ile Asn Arg Ala Leu Ala Ala Lys 105 Lys Asp Asn Asp Phe Ile Tyr His Asp Arg Val Pro Asp Leu Lys Asp 120 -Leu Asp Pro Ile Gly Lys Ala Thr Leu Val Lys Ser Thr Pro Val Asn 130 135 Val Pro Ile Ser Gln Lys Phe Thr Asp Leu Phe Glu Lys Met Val Pro 155 Val Ser Val Gln Gln Ser Leu Ala Ala Tyr Asn Gln Arg Lys Ala Asp 170 Leu Val Asn Arg Ser Ile Ala Gln Met Arg Glu Ala Thr Thr Leu Ala 180 185 190 Asn Gly Val Leu Ala Ser Leu Asn Leu Pro Ala Ala Ile Glu Asp Val 200 Ser Gly Asp Thr Val Pro Gln Ser Ile Leu Thr Lys Ser Arg Ser Val 215 Ile Glu Gin Gly Gly Ile Gln Thr Val Asp Gln Leu Ile Lys Glu Leu 230 235 240 Pro Glu Leu Leu Gln Arg Asn Arg Glu Ile Leu Asp Glu Ser Leu Arg 245 Leu Leu Asp Glu Glu Glu Ala Thr Asp Asn Asp Leu Arg Ala Lys Phe 265

Lys Glu Arg Trp Gln Arg Thr Pro Ser Asn Glu Leu Tyr Lys Pro Leu 275 280 285

Arg Ala Glu Gly Thr Asn Phe Arg Thr Val Leu Asp Lys Ala Val Gln 290 295 300

Ala Asp Gly Gln Val Lys Glu Cys Tyr Gln Ser His Arg Asp Thr Ile

305					310					315					320
Val	Leu	Leu	Cys	Lys 325	Pro	Glu	Pro	Glu	Leu 330	Asn	Ala	Ala	Ile	Pro 335	Ser
Ala	Asn	Pro	Ala 340	Lys	Thr	Met	Gln	Gly 345	Ser	Glu	Val	Val	Asn 350	Val	Leu
Lys	Ser	Leu 355	Leu	Ser	Asn	Leu	Asp 360	Glu	Val	Lys	Lys	Glu 365	Arg	Glu	Gly
Leu	Glu 370	Asn	Asp	Leu	Lys	Ser 375	Val	Asn	Phe	Asp	Met 380	Thr	Ser	Lys	Phe
Leu 385	Thr	Ala	Leu	Ala	Gln 390	Asp	Gly	Val	Ile	Asn 395	Glu	Glu	Ala	Leu	Ser 400
Val	Thr	Glu	Leu	Asp 405	Arg	Val	туг	Gly	Gly 410	Leu	Thr	Thr	Lys	Val 415	Gln
Glu	Ser	Leu	Lys 420	Lys	Gln	Glu	Gly	Leu 425	Leu	Lys	Asn	Ile	Gln 430	Val	Ser
His	Gln	Glu 435	Phe	Ser	Lys	Met	Lys 440	Gln	Ser	Asn	Asn	Glu 445	Ala	Asn	Leu
Arg	Glu 450	Glu	Val	Leu	Lys	Asn 455	Leu	Ala	Thr	Ala	Tyr 460	Asp	Asn	Phe	Val
Glu 465	Leu	Val	Ala	Asn	Leu 470	Lys	Glu	Gly	Thr	Lys 475	Phe	Tyr	Asn	Glu	Leu 480
Thr	Glu	Ile	Leu	Val 485	Arg	Phe	Gln	Asn	Lys 490	Cys	Ser	Asp	Ile	Val 495	Phe
Ala	Arg	Lys	Thr 500	Glu	Arg	Asp	Glu	Leu 505	Leu	Lys	Asp	Leu	Gln 510	Gln	Ser
Ile	Ala	Arg 515	Glu	Pro	Ser	Ala	Pro 520	Ser	Ile	Pro	Thr	Pro 525	Ala	Tyr	Gln
Ser	Ser 530	Pro	Ala	Gly	Gly	His 535	Ala	Pro	Thr	Pro	Pro 540	Thr	Pro	Ala	Pro
Arg 545	Thr	Met	Pro	Pro	Thr 550	Lys	Pro	Gln	Pro	Pro 555	Ala	Arg	Pro	Pro	Pro 560
Pro	Val	Leu	Pro	Ala 565	Asn	Arg	Ala	Pro	Ser 570	Ala	Thr	Ala	Pro	Ser 575	Pro
Val	Gly	Ala	Gly	Thr	Ala	Ala	Pro	Ala	Pro	Ser	Gln	Thr	Pro	Gly	Ser

580 585 590

Ala Pro Pro Gln Ala Gln Gly Pro Pro Tyr Pro Thr Tyr Pro Gly
595 600 605

Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met Gly Tyr Asn Pro Tyr 610 615 620

Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro Val Tyr His Gln Ser 625 630 635 640

Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln Pro Ser Tyr Pro Phe 645 650 655

Pro Gln Pro Pro Gln Gln Ser Tyr Tyr Pro Gln Gln 660 665

<210> 1634

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1634

Gly Glu Ala Ala Lys Met Ser Ser Glu Pro Pro Pro Pro Tyr Pro Gly
1 5 10 15

Gly Pro Thr Ala Pro Leu Leu Glu Glu Lys Ser Gly Ala Pro Pro Thr 20 25 30 Pro Gly Arg Ser Ser Pro Ala Val Met Gln Pro Pro Pro Gly Met Pro
35 40 45

Leu Pro Pro Ala Asp Ile Gly Pro Pro Pro Tyr Glu Pro Pro Gly Xaa 50 60

Pro Met Pro Gln Pro Gly Phe Ile Pro Pro Xaa Met Ser Xaa Asp Gly 65 70 75 80

Xaa Tyr Met Pro Pro Gly Phe Leu Pro Phe Phe Arg Gly Pro His Pro 85 90 95

Pro Leu Gly

<210> 1635

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1635

Gly Glu Ala Ala Phe Cys Pro Ser Pro His Ser His Leu Ile Tyr Leu 1 5 10 15

Ile Gln Ser Gln Leu Leu Lys Phe Gly Lys Asp Gln Ile Ala Leu Gln
20 25 30

Phe Phe Ser Leu Cys Ser Ile Leu Lys Ser Trp Lys Ile Leu Trp Asn 35 40 45

Ser Ser Val Tyr Arg Ala Gln Val Lys Ala Leu Ser Lys Val Tyr Leu 50 55 60

Phe Ile Tyr Tyr Pro Lys Asn Ala Leu Pro 65 70

<210> 1636

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1636

Arg His Arg Ser Val Ser Thr Pro Arg Ala Gly Gly Ile Val Trp Phe $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

His Glu Gly Leu Lys Ser Val Ile Pro Lys Val Gly Leu Gln Ala Ala 20 25 30

Ala Pro Ser Ile Cys Val Phe Leu Ser Gly Thr Val Gly Leu Tyr Xaa 35 40 45

Arg Leu Thr Cys Phe Gly Ser Arg Gly Ile Ile Leu Gly Phe Gly Lys 50 55 60

Thr His Phe

<210> 1637

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1637

Thr Phe Ile Tyr Val Gly Leu Tyr Leu Thr Ile Cys Asn Phe Lys Val 1 5 10 15

Met Leu Gly Gln Xaa Asn Val Ser Ala Ser Arg Ile Ala Ile Lys Tyr 20 25 30

His Thr Lys Phe Gly Gly Arg Thr Asp Leu Cys Tyr Lys Glu Met Glu
35 40 45

Lys Ser Ser Leu Cys His Gly Asp Glu Lys Pro Ala Ser His Ser Asn 50 60

<210> 1638

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1638

Gln Arg Gly Asp Ser Ala Asp Thr Ala Ser Leu Arg Phe Asn Thr Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15 \hspace{1cm} \circ$

Ser Phe Asp Leu Ser Cys Pro His Tyr Pro Arg Lys Ile Gln Ser Ser 20 25 30

Phe Gln Ser Ile Leu Ile Asn Pro Leu Asp Pro Lys Phe Arg Glu Val 35 40 45

Pro Leu Pro Ser Ser Leu Leu Pro Gly Pro Thr Glu Glu His Pro Thr 50 55 60

Thr Leu His Gln Leu Leu Lys Thr His Lys Gly Lys Ile Pro Thr Gly 65 70 75 80

Pro Cys Gln Glu Val Val Glu Leu Pro Xaa Arg Phe His
85 90

<210> 1639

<211> 222

<212> PRT

<213> Homo sapiens

<400> 1639

His Glu Leu Asn Cys Lys Asp Ala Val Ser Arg Lys Arg Ser His Ser 1 5 10 15

Ala Ser Glu Lys Ser Gly Thr Gly Thr Ser Ile Ser Lys Arg Leu Asn 20 25 30

Met Asn Pro Gln Ile Arg Asn Pro Met Lys Ala Met Tyr Pro Gly Thr 35 40 45

Phe Tyr Phe Gln Phe Lys Asn Leu Trp Glu Ala Asn Asp Arg Asn Glu 50 55 60

Thr Trp Leu Cys Phe Thr Val Glu Gly Ile Lys Arg Arg Ser Val Val 65 70 75 80

Ser Trp Lys Thr Gly Val Phe Arg Asn Gln Val Asp Ser Glu Thr His 85 90 95

Cys His Ala Glu Arg Cys Phe Leu Ser Trp Phe Cys Asp Asp Ile Leu 100 105 110 Ser Pro Asn Thr Lys Tyr Gln Val Thr Trp Tyr Thr Ser Trp Ser Pro 115 120 125

Cys Pro Asp Cys Ala Gly Glu Val Ala Glu Phe Leu Ala Arg His Ser 130 135 140

Asn Val Asn Leu Thr Ile Phe Thr Ala Arg Leu Tyr Tyr Phe Gln Tyr 145 150 155 160

Pro Cys Tyr Gln Glu Gly Leu Arg Ser Leu Ser Gln Glu Gly Val Ala 165 170 175

Val Glu Ile Met Asp Tyr Glu Asp Phe Lys Tyr Cys Trp Glu Asn Phe 180 185 190

Val Tyr Asn Asp Asn Glu Pro Phe Lys Pro Trp Lys Gly Leu Lys Thr 195 200 205

Asn Phe Arg Leu Leu Lys Arg Arg Leu Arg Glu Ser Leu Gln 210 215 220

<210> 1640

<211> 436

<212> PRT

<213> Homo sapiens

<400> 1640

Gly Leu Lys Arg Val Ser Ala Thr Ala Ala His Arg Asn Ala Leu Gln
1 5 10 15

Asn Pro Lys Gln Gly Gly Thr Gln Leu Lys Thr Glu Lys Ile His Met
20 25 30

Phe Leu Leu Ala Pro Val Ala Thr Gly Ile Asn Ser His Asn Asp Arg
35 40 45

Gly Arg Gly Ile Gln Gly Thr Ile Asn Glu Gln Cys Ala Ser Ser Leu
50 55 60

Lys Ile Arg Ala Ser His Gly Thr Lys Met Met Thr Pro Glu Val Leu
65 70 75 80

Ala Glu Ala Tyr Gly Lys Lys Glu Trp Lys His Phe Leu Ser Asp Thr 85 90 95

Gly Met Ala Cys Arg Ser Gly Lys Tyr Tyr Phe Tyr Asp Asn Tyr Phe 100 105 110

Asp	Leu	Pro 115	Gly	Ala	Leu	Leu	Cys 120	Ala	Arg	Val	Val	Asp 125	Tyr	Leu	Thr
Lys	Leu 130	Asn	Asn	Gly	Gln	Lys 135	Thr	Phe	Asp	Phe	Trp 140	Lys	Asp	Ile	Val
Ala 145	Ala	Ile	Gln	His	Asn 150	Tyr	Lys	Met	Ser	Ala 155	Phe	Lys	Glu	Asn	Cys 160
Gly	Ile	Tyr	Phe	Pro 165	Glu	Ile	Lys	Arg	Asp 170	Pro	Gly	Arg	Tyr	Leu 175	His
Ser	Cys	Pro	Glu 180	Ser	Val	Lys	Lys	Trp 185	Leu	Arg	Gln	Leu	Lys 190	Asn	Ala
Gly	Lys	Ile 195	Leu	Leu	Leu	Ile	Thr 200	Ser	Ser	His	Ser	Asp 205	Tyr	Cys	Arg
Leu	Leu 210	Cys	Glu	Tyr	Ile	Leu 215	Gly	Asn	Asp	Phe	Thr 220	Asp	Leu	Phe	Asp
Ile 225	Val	Ile	Thr	Asn	Ala 230	Leu	Lys	Pro	Gly	Phe 235	Phe	Ser	His	Leu	Pro 240
Ser	Gln	Arg	Pro	Phe 245	Arg	Thr	Leu	Glu	Asn 250	Asp	Glu	Glu	Gln	Glu 255	Ala
Leu	Pro	Ser	Leu 260	Asp	Lys	Pro	Gly	Trp 265	Tyr	Ser	Gln	Gly	Asn 270	Ala	Val
His	Leu	Tyr 275	Glu	Leu	Leu	Lys	Lys 280	Met	Thr	Gly	Lys	Pro 285	Glu	Pro	Lys
Val	Val 290	Tyr	Phe	Gly	Asp	Ser 295	Met	His	Ser	Asp	11e 300	Phe	Pro	Ala	Arg
His 305	Tyr	Ser	Asn	Trp	Glu 310	Thr	Val	Leu	Ile	Leu 315	Glu	Glu	Leu	Arg	Gly 320
Asp	Glu	Gly	Thr	Arg 325	Ser	Gln	Arg	Pro	Glu 330	Glu	Ser	Glu	Pro	Leu 335	Glu
Lys	Lys	Gly	Lys 340	Tyr	Glu	Gly	Pro	Lys 345	Ala	Lys	Pro	Leu	Asn 350	Thr	Ser
Ser	Lys	Lys 355	Trp	Gly	Ser	Phe	Phe 360	Ile	Asp	Ser	Val	Leu 365	Gly	Leu	Glu
Asn	Thr 370	Glu	Asp	Ser	Leu	Val 375	Tyr	Thr	Trp	Ser	Cys 380	Lys	Arg	Ile	Ser

```
Thr Tyr Ser Thr Ile Ala Ile Pro Ser Ile Glu Ala Ile Ala Glu Leu
Pro Leu Asp Tyr Lys Phe Thr Arg Phe Ser Ser Ser Asn Ser Lys Thr
                          410
Ala Gly Tyr Tyr Pro Asn Pro Pro Leu Val Leu Ser Ser Asp Glu Thr
            420
                               425
Leu Ile Ser Lys
      435
<210> 1641
<211> 81
<212> PRT
<213> Homo sapiens
<400> 1641
Pro His Ser Leu Leu Phe Phe Leu Leu Gln Thr Leu Arg Gln Cys Ser
                                    10
Asn Thr Ser Phe Thr His Pro Pro Asn Asn Ser Val His Ser Val Phe
                                25
Phe Pro Leu Ser Gly Val Ser Ser Met Leu Val Arg Leu Gly Glu His
                            40
Leu Asp Leu Phe His Arg Lys Gly Cys Phe Gln Pro Val Ser Val Met
Leu Val Leu Leu Gln Gln Ser Lys Ser Lys Gly Phe Arg Ser Leu Phe
                    70
Asp
<210> 1642
<211> 86
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
```

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (66)

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1642

Thr Glu Lys Lys Lys Lys Gly Gly Arg Ser Arg Gly Ser Lys Leu
1 5 10 15

Thr Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys
20 25 30

Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro 35 40 45

Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser 50 55 60

Trp Xaa Asn Ser Glu Glu Ala Arg Xaa Gly Ser Pro Phe Pro His Asn 65 70 75 80

Cys Ala Leu Glu Trp Ala 85

<210> 1643

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1643

His Cys Val Glu Gly Thr Ser Leu Ser Leu Pro Cys Leu Thr Val Ser 1 5 10 15

Gly Ser Phe Ser Pro Cys Val Ser Trp Cys Ser Gln Pro His Gln Ser 20 25 30

Pro Cys Arg Glu Leu Thr Ala Phe Thr Leu Lys Ala Arg Val Thr Trp 35 40 45

Val Val Arg His His Leu Ser Pro Cys Pro His Leu Leu Val Trp Gly 50 55 60

Phe Ser Gly Glu Leu Thr Ala Val Ser Thr Pro Leu Ser Pro His Pro 65 70 75 80

Pro Arg Pro Ala Trp Gly Thr His Phe Leu Leu Gly Gly Ala Ser Met
85 90 95

Val Arg Gly Pro Ala Ser Leu His Thr Ala Arg Thr Ala Leu His Arg
100 105 110

```
Pro Thr Pro Tyr Asp Thr
        115
<210> 1644
<211> 52
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1644
Arg Leu Ser Glu Ser Leu Ser Val Ser Ser Leu Gln Xaa Arg Ser Xaa
                                     10
Xaa Val Lys Pro Leu Thr Ala Val Met Ser Glu Val Ile Pro Arg Thr
             20
                                 25
Trp Glu Thr Ala Val His Gly Trp Ile Leu Leu Thr Ser Ala Glu Phe
         35
                             40
Cys Gln Val Thr
    50
<210> 1645
<211> 346
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220> <221> SITE <222> (83) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1645 Pro Pro Ala Ser Thr Leu Pro Trp Asp Leu Met Lys Ser Arg Lys Asn 10 Phe Lys Lys Trp Pro Leu Thr Leu Leu Pro Glu Arg Trp Leu Gln Ile Trp Gln Xaa Gly Thr Arg Ser Met Cys Ala Trp Met Ile Asp Ser Phe 40 Gly Asn Glu Glu Gln Arg His Lys Phe Cys Pro Pro Leu Cys Thr Met 55 Glu Lys Phe Ala Ser Tyr Cys Leu Thr Glu Pro Gly Ser Gly Ser Asp 70 Ala Ala Xaa Leu Leu Thr Ser Ala Lys Lys Gln Gly Asp His Tyr Ile 90 Leu Asn Gly Ser Lys Ala Phe Ile Ser Gly Ala Gly Glu Ser Asp Ile 100 Tyr Val Val Met Cys Arg Thr Gly Gly Pro Gly Pro Lys Gly Ile Ser 120 Cys Ile Val Val Glu Lys Gly Thr Pro Gly Leu Ser Phe Gly Lys Lys 135 Glu Lys Lys Val Gly Trp Asn Ser Gln Pro Thr Arg Ala Val Ile Phe 145 150 160 Glu Asp Cys Ala Val Pro Val Ala Asn Arg Ile Gly Ser Glu Gly Gln 170 Gly Phe Leu Ile Ala Val Arg Gly Leu Asn Gly Gly Arg Ile Asn Ile 185 Ala Ser Cys Ser Leu Gly Ala Ala His Ala Ser Val Ile Leu Thr Arg 195 200 Asp His Leu Asn Val Arg Lys Gln Phe Gly Glu Pro Leu Ala Ser Asn 220

Gln Tyr Leu Gln Phe Thr Leu Ala Asp Met Ala Thr Arg Leu Val Ala

235

230

Ala Arg Leu Met Val Arg Asn Ala Ala Val Ala Leu Gl
n Glu Glu Arg 245 250 255

Lys Asp Ala Val Ala Leu Cys Ser Met Ala Lys Leu Phe Ala Thr Asp 260 265 270

Glu Cys Phe Ala Ile Cys Asn Gln Ala Leu Gln Met His Gly Gly Tyr 275 280 285

Gly Tyr Leu Lys Asp Tyr Ala Val Gln Gln Tyr Val Arg Asp Ser Arg 290 295 300

Val His Gln Ile Leu Glu Glu Leu Phe Trp Gln Gly Pro Gly Val Gln 305 310 315 320

Ser Arg Ser Phe Ala Leu Phe Gly Gly Pro Gln Ile Pro Leu Leu Leu 325 330 335

Pro Phe Ser Ser Gly Asp Leu Arg Glu Gly 340 345

<210> 1646

<211> 201

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1646

Cys Asn Leu Ala Lys Xaa Val Ile Ser Ile Ser Phe Leu Lys Glu Glu 1 5 10 15

Glu Glu Asp Glu Glu Glu Ile Asp Val Val Ser Val Glu Lys Arg 20 25 30

Gln Ala Pro Gly Lys Arg Ser Glu Ser Gly Ser Pro Ser Ala Gly Gly
35 40 45

His Ser Lys Pro Pro His Ser Pro Leu Val Leu Lys Arg Cys His Val
50 55 60

Ser Thr His Gln His Asn Tyr Ala Ala Pro Pro Ser Thr Arg Lys Asp 65 70 75 80

Tyr Pro Ala Ala Lys Arg Val Lys Leu Asp Ser Val Arg Val Leu Arg 85 90 95 Gln Ile Ser Asn Asn Arg Lys Cys Thr Ser Pro Arg Ser Ser Asp Thr 100 105 110

Glu Glu Asn Val Lys Arg Arg Thr His Asn Val Leu Glu Arg Gln Arg 115 120 125

Arg Asn Glu Leu Lys Arg Ser Phe Phe Ala Leu Arg Asp Gln Ile Pro 130 135 140

Ala Thr Ala Tyr Ile Leu Ser Val Gln Ala Glu Glu Gln Lys Leu Ile 165 170 175

Ser Glu Glu Asp Leu Leu Arg Lys Arg Arg Glu Gln Leu Lys His Lys 180 185 190

Leu Glu Gln Leu Arg Asn Ser Cys Ala 195 200

<210> 1647

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1647

Ser Ile Tyr Asp Ser Ser Lys Lys Asn His Leu Leu Tyr Ala Gly Asp 1 5 10 15

Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln 20 25 30

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys 35 40 45

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr 50 55 60

Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu 65 70 75 80

Tyr Glu Leu Phe

```
<211> 60
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
<22.0>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1648
Leu Lys Ile Asn Tyr Ile Lys Ile Ser Phe Phe Val Leu Val Phe Phe
Leu Xaa Thr Leu Cys Phe Lys Tyr Lys Xaa Lys Tyr Xaa Ile Tyr Phe
             20
Cys Val Leu Pro Ser Glu Leu Lys Phe Pro Met Xaa Leu Thr Glu Leu
Gly Leu Ala Leu Gly Glu Glu Trp Thr Ala Ala Gly
                         55
<210> 1649
<211> 390
<212> PRT
<213> Homo sapiens
<400> 1649
Ala Arg Gly Glu Cys Cys Arg Gly Gly Leu Trp Glu Lys Met Ala Ala
Ala Ala Gln Ser Arg Val Val Arg Val Leu Ser Met Ser Arg Ser Ala
             20
                                 25
```

Tle	ጥክ r	Ala	Tle	Ala	Thr	Sor	t/a l	Cve	Hic	Glv	Pro	Pro	Cve	Arg	Gla
,		35				Der	40	Cys	5	O1,	110	45	cys	9	01
Leu	His 50	His	Ala	Leu	Met	Pro 55	His	Gly	Lys	Gly	Gly 60	Arg	Ser	Ser	Val
Ser 65	Gly	Ile	Val	Ala	Thr 70	Val	Phe	Gly	Ala	Thr 75	Gly	Phe	Leu	Gly	Arg 80
Tyr	Val	Val	Asn	His 85	Leu	Gly	Arg	Met	Gly 90	Ser	Gln	Val	Ile	Ile 95	Pro
Tyr	Arg	Cys	Asp 100	Lys	Tyr	Asp	Ile	Met 105	His	Leu	Arg	Pro	Met 110	Gly	Asp
Leu	Gly	Gln 115	Leu	Leu	Phe	Leu	Glu 120	Trp	Asp	Ala	Arg	Asp 125	Lys	Asp	Ser
Ile	Arg 130	Arg	Val	Val	Gln	His 135	Ser	Asn	Val	Val	11e 140	Asn	Leu	Ile	Gly
Arg 145	Asp	Trp	Glu	Thr	Lys 150	Asn	Phe	Asp	Phe	Glu 155	Asp	Val	Phe	Val	Lys 160
Ile	Pro	Gln	Ala	Ile 165	Ala	Gln	Leu	Ser	Lys 170	Glu	Ala	Gly	Val	Glu 175	Lys
Phe	Ile	His	Val 180	Ser	His	Leu	Asn	Ala 185	Asn	Ile	Lys	Ser	Ser 190	Ser	Arg
Tyr	Leu	Arg 195	Asn	Lys	Ala	Val	Gly 200	Glu	Lys	Val	Val	Arg 205	Asp	Ala	Phe
Pro	Glu 210	Ala	Ile	Ile	Val	Lys 215	Pro	Ser	Asp	Ile	Phe 220	Gly	Arg	Glu	Asp
Arg 225	Phe	Leu	Asn	Ser	Phe 230	Ala	Ser	Met	His	Arg 235	Phe	Gly	Pro	Ile	Pro 240
Leu	Gly	Ser	Leu	Gly 245	Trp	Lys	Thr	Val	Lys 250	Gln	Pro	Val	Tyr	Val 255	Val
Asp	Val	Ser	Lys 260	Gly	Ile	Val	Asn	Ala 265	Val	Lys	Asp	Pro	Asp 270	Ala	Aśn
Gly	Lys	Ser 275	Phe	Ala	Phe	Val	Gly 280	Pro	Ser	Arg	Tyr	Leu 285	Leu	Phe	His

Leu Val Lys Tyr Ile Phe Ala Val Ala His Arg Leu Phe Leu Pro Phe

300

295

290

Pro Leu Pro Leu Phe Ala Tyr Arg Trp Val Ala Arg Val Phe Glu Ile 310 315 Ser Pro Phe Glu Pro Trp Ile Thr Arg Asp Lys Val Glu Arg Met His 325 330 Ile Thr Asp Met Lys Leu Pro His Leu Pro Gly Leu Glu Asp Leu Gly 340 345 Ile Gln Ala Thr Pro Leu Glu Leu Lys Ala Ile Glu Val Leu Arg Arg 360 His Arg Thr Tyr Arg Trp Leu Ser Ala Glu Ile Glu Asp Val Lys Pro 375 Ala Lys Thr Val Asn Ile 385 390 <210> 1650 <211> 99 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (92) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1650 Gly Ser Met Gly Gln Ala Gln Ser Lys Pro Thr Pro Pro Gly Thr Met 5 Leu Lys Asn Phe Lys Lys Gly Phe Xaa Gly Asp Tyr Gly Val Thr Met 20 25

Thr Pro Gly Lys Leu Arg Thr Leu Cys Glu Ile Asp Trp Pro Ala Leu 35 40 45

Glu Val Gly Trp Pro Ser Glu Gly Ser Xaa Asp Arg Ser Leu Val Ser 50 55 60

Lys Val Trp His Lys Val Thr Cys Lys Pro Gly Cys Pro Asp Gln Phe 65 70 75 80

Xaa Tyr Ile Asp Thr Trp Leu Gln Leu Val Leu Xaa Pro Ser Tyr Pro 85 90 95

His Gly Gly

<210> 1651

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1651

Ala Gly Thr Gly Gly Arg Arg Trp Gly Asn Arg Gly Ser Val Arg Leu

1 5 10 15

Arg Val Arg Gly Ser Asp Trp Ala Glu Gln Ala Ser His Arg Arg Val 20 25 30

Thr Ala Arg Arg Pro Arg Ser Glu Leu Pro Gly Gln Pro Pro Phe Cys
35 40 45

Trp Arg Trp Glu Arg Met Trp Ala Trp Gly Trp Gly Gly Ala Lys Leu 50 55 60

Arg Gly Arg Ala Ala Asp Thr Leu Lys Leu Arg Ala Gly Arg Ala Gln 65 70 75 80

Arg Lys Gly Arg Arg Xaa His Gly Tyr Pro Ser Val Arg Gly Ser Ser 85 90 95

Ser Phe Phe Trp Arg Ala Gln Gly Ala Ala Gly Val Met Ser Pro Trp
100 105 110

Val Leu Ala Pro Thr Ala Lys Phe Ala Trp Pro Gly Pro Pro Ser Arg

3

115 120 125

Gly Leu Thr Arg His Thr Asp Gln Asn Pro Glu Gln Ala Val Leu Ser 130 135 140

Ile Leu Arg Leu Leu Arg Leu Pro Arg 145 150

<210> 1652

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (289)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1652

Thr Phe Ile Trp Leu Ile Leu Ile Met Asn Arg Ala Phe Ser Arg Lys

1 10 15

Lys Asp Lys Thr Trp Met His Thr Pro Glu Ala Leu Ser Lys His Phe 20 25 30

Ile Pro Tyr Asn Ala Lys Phe Leu Gly Ser Thr Glu Val Glu Gln Pro 35 40 45

Lys Gly Thr Glu Val Val Arg Asp Ala Val Arg Lys Leu Lys Phe Ala 50 55 60

Arg His Ile Lys Lys Ser Glu Gly Gln Lys Ile Pro Lys Val Glu Leu 65 70 75 80

Gln Ile Ser Ile Tyr Gly Val Lys Ile Leu Glu Pro Lys Thr Lys Glu 85 90 95

Val Gln His Asn Cys Gln Leu His Arg Ile Ser Phe Cys Ala Asp Asp 100 105 110

Lys Thr Asp Lys Arg Ile Phe Thr Phe Ile Cys Lys Asp Ser Glu Ser 115 120 125

Asn Lys His Leu Cys Tyr Val Phe Asp Ser Glu Lys Cys Ala Glu Glu 130 135 140

Ile Thr Leu Thr Ile Gly Gln Ala Phe Asp Leu Ala Tyr Arg Lys Phe 145 150 155 160

Leu Glu Ser Gly Gly Lys Asp Val Glu Thr Arg Lys Gln Ile Ala Gly
165 170 175

Leu Gln Lys Arg Ile Gln Asp Leu Glu Thr Glu Asn Met Glu Leu Lys 180 185 190

Asn Lys Val Gln Asp Leu Glu Asn Gln Leu Arg Ile Thr Gln Val Ser 195 200 205

Ala Pro Pro Ala Gly Ser Met Thr Pro Lys Ser Pro Ser Thr Asp Ile 210 215 220

Phe Asp Met Ile Pro Phe Ser Pro Ile Ser His Gln Ser Ser Met Pro 225 230 235 240

Thr Arg Asn Gly Thr Gln Pro Pro Pro Val Pro Ser Arg Ser Thr Glu 245 250 255

Ile Lys Arg Asp Leu Phe Gly Ala Glu Pro Phe Asp Pro Phe Asn Cys 260 265 270

Gly Ala Ala Asp Phe Pro Pro Asp Ile Gln Ser Lys Leu Asp Glu Met 275 280 285

Xaa Glu Gly Phe Lys Met Gly Leu Thr Leu Glu Gly Thr Val Phe Cys 290 295 300

Leu Asp Pro Leu Asp Ser Arg Cys 305 310

<210> 1653

<211> 50

<212> PRT

<213> Homo sapiens

<400> 1653

Tyr Gly Leu Gly Lys Lys Thr Lys Gln Ala Ser Cys Cys Leu Phe Tyr
1 5 10 15

Ser Asn Ile Leu Leu His Met Ile Asp Ile Phe Val Val Gly Lys Trp
20 25 30

Asp Ala Pro Gln Ile Leu Lys Val Leu Ala Asp Cys Ile Leu Ser Leu 35 40 45

Lys Ile

50

```
<210> 1654
<211> 117
<212> PRT
<213> Homo sapiens
<400> 1654
Tyr Lys Asn Asp Arg Ser Ser Tyr Glu Arg His Ala Asn Glu Thr Pro
Ser Ser Gly Glu Ala Leu Glu Ser Glu Leu Ser Phe Phe Leu Met Ser
                                 25
Ser Asp Ala Ala Ser Phe Leu Ile Phe Leu Lys Thr Val Cys Phe Cys
                             40
Gly Met Tyr Ile Cys Thr Pro Asn Tyr Leu Ala Leu Gly Asn His Ser
                         55
Thr Thr Gln Arg Gln Leu Asn Lys Glu Lys Phe Asn Phe Lys Tyr Gln
 65
                     70
                                         75
Val Leu Ser Asn Ile Ser Gln Thr Ser Asp Phe Ile Lys Gly Leu Pro
                 85
                                     90
Ala Asn Lys Val His Pro Lys Tyr Thr Gly Glu Lys Ala Arg Leu Leu
                                105
Gln Gly Pro Arg Val
       115
<210> 1655
<211> 373
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (290)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (325)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (328)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1655

Val Met Ser Thr Ala Ala Leu Ile Thr Leu Val Arg Ser Gly Gly Asn
1 5 10 15

Gln Val Arg Arg Val Leu Leu Ser Ser Arg Leu Leu Gln Asp Asp
20 25 30

Arg Arg Val Thr Pro Thr Cys His Ser Ser Thr Ser Glu Pro Arg Cys
35 40 45

Ser Arg Phe Asp Pro Asp Gly Ser Gly Ser Pro Ala Thr Trp Asp Asn 50 55 60

Phe Gly Ile Trp Asp Asn Arg Ile Asp Glu Pro Ile Leu Leu Pro Pro 65 70 75 80

Ser Ile Lys Tyr Gly Lys Pro Ile Pro Lys Ile Ser Leu Glu Asn Val 85 90 95

Gly Cys Ala Ser Gln Ile Gly Lys Arg Lys Glu Asn Glu Asp Arg Phe 100 105 110

Asp Phe Ala Gln Leu Thr Asp Glu Val Leu Tyr Phe Ala Val Tyr Asp 115 120 125

Gly His Gly Gly Pro Ala Ala Ala Asp Phe Cys His Thr His Met Xaa 130 135 140

Lys Cys Ile Met Asp Leu Leu Pro Lys Glu Lys Asn Leu Glu Thr Leu 145 150 155 160

Leu Thr Leu Ala Phe Leu Glu Ile Asp Lys Ala Phe Ser Ser His Ala 165 170 175

Arg Leu Ser Ala Asp Ala Thr Leu Leu Thr Ser Gly Thr Thr Ala Thr 180 185 190

Val Ala Leu Leu Arg Asp Gly Ile Glu Leu Val Val Ala Ser Val Gly
195 200 205

Asp Ser Arg Ala Ile Leu Cys Arg Lys Gly Lys Pro Met Lys Leu Thr 210 215 220

Ile Asp His Thr Pro Glu Arg Lys Asp Glu Lys Glu Arg Ile Lys Lys

235

240

230

225

Cys Gly Gly Phe Val Ala Trp Asn Ser Leu Gly Gln Pro His Val Asn 245 250 Gly Arg Leu Ala Met Thr Arg Ser Ile Gly Asp Leu Asp Leu Lys Thr 265 Ser Gly Val Ile Ala Glu Pro Glu Thr Lys Arg Ile Lys Leu His His 275 280 Ala Xaa Asp Ser Phe Leu Val Leu Thr Thr Asp Gly Ile Asn Phe Met 295 Val Asn Ser Gln Glu Ile Cys Asp Phe Val Asn Gln Cys His Asp Pro 315 Asn Glu Ala Ala Xaa Ala Val Xaa Glu Gln Ala Ile Gln Tyr Gly Thr 325 330 Glu Asp Asn Ser Thr Ala Val Val Pro Phe Gly Ala Trp Gly Lys 345 Tyr Lys Asn Ser Glu Ile Asn Phe Ser Phe Ser Arg Ser Phe Ala Ser 360 Ser Gly Arg Trp Ala 370 <210> 1656 <211> 82 <212> PRT <213> Homo sapiens <400> 1656 Arg Pro Thr Arg Pro Pro Gly Arg Thr Ala Ser Arg Leu Ala Glu Cys 5 Gly Leu Ala Gly Ser Ala Val Ser Gln Arg Glu Gln Thr Ser Pro Ser Pro Ser Gly Gln Leu Arg Glu Lys Asn Phe Arg Glu Phe Pro Ala Gly 40 Lys Ala Val Ala Ala Leu Thr Ala Cys Phe Gly Asp Pro Arg Arg 55 Arg Arg His Ser Tyr Leu Pro Thr Lys Lys Ala Pro Pro Pro Ser Ser 70

75

Val Ser

<210> 1657

<211> 273

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1657

Val Ala Arg Ser Ser Ser Glu Leu Pro Arg Arg Leu Val Cys Ser Lys
1 5 10 15

Leu Arg Ala Asp Pro Gly Arg Leu Thr Pro Asp Ala Cys Xaa Arg Pro 20 25 30

Gly Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala 35 40 45

Gly Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro 50 60

Ser Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn
65 70 75 80

Thr Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly
85 90 95

Asn Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala 100 105 110

Lys Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His 115 120 125

Leu Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile 130 135 140

Ile Glu Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val 145 150 155 160

Met Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe 165 170 175

Gly Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp

180 185 190

Lys Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu 195 200 205

Ala His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr 210 215 220

Arg Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile 225 230 235 240

Val Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala 245 250 255

Leu Gly Ser Ala Ser Leu Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe 260 265 270

Pro

<210> 1658

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1658

Tyr Leu Cys Ile Leu Gln Ala Ser Lys Leu Glu Asp Leu Arg Val Lys
1 5 10 15

Leu Lys Lys Glu Gly Tyr Ser Asn Ile Ser Tyr Ile Val Val Asn His 20 25 30

Gln Gly Ile Ser Ser Arg Leu Lys Tyr Thr His Leu Lys Asn Lys Val 35 40 45

Ser Glu His Ile Pro Val Tyr Gln Gln Glu Glu Asn Gln Thr Asp Val 50 55 60

Trp Thr Leu Leu Asn Gly Ser Lys Asp Asp Phe Leu Ile Tyr Asp Arg
65 70 75 80

Cys Gly Arg Leu Val Tyr His Leu Gly Leu Pro Phe Ser Phe Leu Thr 85 90 95

Phe Pro Tyr Val Glu Glu Ala Ile Lys Ile Ala Tyr Cys Glu Lys Lys 100 105 110

Cys Gly Asn Cys Ser Leu Thr Thr Leu Lys Asp Glu Asp Phe Cys Lys 115 120 125 Arg Val Ser Leu Ala Thr Val Asp Lys Thr Val Glu Thr Pro Ser Pro 130 135 140

His Tyr His His Glu His His His Asn His Gly His Gln His Leu Gly
145 150 155 160

Ser Ser Glu Leu Ser Glu Asn Gln Gln Pro Gly Ala Pro Asn Ala Pro 165 170 175

Thr His Pro Ala Pro Pro Gly Leu His His His His Lys His Lys Gly
180 185 190

Gln His Arg Gln Gly His Pro Glu Asn Arg Asp Met Pro Ala Ser Glu 195 200 205

Asp Leu Gln Asp Leu Gln Lys Lys Leu Cys Arg Lys Arg Cys Ile Asn 210 215 220

Gln Leu Leu Cys Lys Leu Pro Thr Asp Ser Glu Leu Ala Pro Arg Ser 225 230 235 240

<210> 1659

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1659

Xaa Thr Arg Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Gly Ser Gln
1 5 10 15

Gly Pro Leu Pro Ala Leu Ala Ala Gly Ser Thr Phe Pro Val Leu Ala 20 25 30

Cys Ser Ser Ala Met Ala Pro Lys Gly Ser Ser Lys Gln Gln Ser Glu 35 40 45

Glu Asp Leu Leu Gln Asp Phe Ser Arg Asn Leu Ser Ala Lys Ser 50 55 60

Ser Ala Leu Phe Phe Gly Asn Ala Phe Ile Val Ser Ala Ile Pro Ile

65 70 75 80 Trp Leu Tyr Trp Arg Ile Trp His Met Asp Leu Ile Gln Ser Ala Val 85 90 Leu Tyr Ser Val Met Thr Leu Val Ser Thr Tyr Leu Val Ala Phe Ala 105 Tyr Lys Asn Val Lys Phe Val Leu Lys His Lys Val Ala Gln Lys Arg 115 120 125 Glu Asp Ala Val Ser Lys Glu Val Thr Arg Lys Leu Ser Glu Ala Asp 135 Asn Arg Lys Met Ser Arg Lys Glu Lys Asp Glu Arg Ile Leu Trp Lys 150 155 Lys Asn Glu Val Ala Asp Tyr Glu Ala Thr Thr Phe Ser Ile Phe Tyr 165 170 Asn Asn Thr Leu Phe Leu Val Val Val Ile Val Ala Ser Phe Phe Ile 185 Leu Lys Asn Phe Asn Pro Thr Val Asn Tyr Ile Leu Ser Ile Ser Ala 200 Ser Ser Gly Leu Ile Ala Leu Leu Ser Thr Gly Ser Lys 210 215 <210> 1660 <211> 421 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)

<220> <221> SITE <222> (321) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (383) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (403) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1660 Glu Leu Gly Ala Gly Gly Asp Gly His Arg Gly Gly Asp Gly Ala Val Arg Ser Glu Thr Ala Pro Asp Ser Tyr Lys Val Gln Asp Lys Lys Asn 20 25 Ala Ser Ser Arg Pro Ala Ser Ala Ile Ser Gly Gln Asn Asn His 40 Ser Gly Asn Lys Pro Asp Pro Pro Pro Val Leu Arg Val Asp Asp Arg 55 Gln Arg Leu Ala Arg Glu Arg Arg Glu Glu Arg Glu Lys Gln Leu Ala 65 70 75 Ala Arg Glu Ile Val Trp Leu Glu Arg Glu Glu Arg Ala Arg Gln His 85 Tyr Glu Lys His Leu Glu Glu Arg Lys Lys Arg Leu Glu Glu Gln Arg 105 Gln Lys Glu Glu Arg Arg Ala Ala Val Glu Glu Lys Arg Arg Gln 120 125 Arg Leu Glu Glu Asp Lys Glu Arg His Glu Ala Xaa Val Arg Arg Thr 130 135 Met Glu Arg Ser Gln Lys Pro Lys Gln Lys His Asn Arg Trp Ser Trp 150 155 Gly Gly Ser Xaa His Gly Xaa Pro Ser Ile His Ser Ala Ala Arg Arg 165 170 Leu Gln Leu Ser Pro Trp Glu Ser Ser Val Val Asn Arg Leu Leu Thr 180 185

Pro	Thr	His 195	Ser	Phe	Leu	Ala	Arg 200	Ser	Lys	Ser	Thr	Ala 205	Ala	Leu	Ser
Gly	Glu 210	Ala	Ala	Ser	Cys	Ser 215	Pro	Ile	Ile	Met	Pro 220	Tyr	Lys	Ala	Ala
His 225	Ser	Arg	Asn	Ser	Met 230	Asp	Arg	Pro	Lys	Leu 235	Phe	Val	Thr	Pro	Pro 240
Glu	Gly	Ser	Ser	Arg 245	Arg	Arg	Ile	Ile	His 250	Gly	Thr	Ala	Ser	Tyr 255	Lys
Lys	Glu	Arg	Glu 260	Arg	Glu	Asn	Val	Leu 265	Phe	Leu	Thr	Ser	Gly 270	Thr	Arg
Arg	Ala	Val 275	Ser	Pro	Ser	Asn	Pro 280	Lys	Ala	Arg	Gln	Pro 285	Ala	Arg	Ser
Arg	Leu 290	Trp	Leu	Pro	Ser	Lys 295	Ser	Leu	Pro	His	Leu 300	Pro	Gly	Thr	Pro
Arg 305	Pro	Thr	Ser	Ser	Leu 310	Pro	Pro	Gly	Ser	Val 315	Lys	Ala	Ala	Pro	Ala 320
Xaa	Val	Arg	Pro	Pro 325	Ser	Pro	Gly	Asn	Ile 330	Arg	Pro	Val	Lys	Arg 335	Glu
Val	Lys	Val	Glu 340	Pro	Glu	Lys	Lys	Asp 345	Pro	Glu	Lys	Glu	Pro 350	Gln	Lys
Val	Ala	Asn 355	Glu	Pro	Ser	Leu	Lys 360	Gly	Arg	Ala	Pro	Leu 365	Val	Lys	Val
Glu	Glu 370	Ala	Thr	Val	Glu	Glu 375	Arg	Thr	Pro	Ala	Glu 380	Pro	Glu	Xaa	Gly
Leu 385	Leu	Leu	Gln	Pro	Trp 390	Pro	Gln	Leu	Gln	Pro 395	Arg	Pro	Gln	Leu	Gln 400
Pro	Arg	Xaa	Gln	Leu 405	Gln	Pro	Arg	Ser	Pro 410	Pro	Gln	Pro	Trp	Ser 415	Gln
Pro	Arg	His	Pro	Leu											

<210> 1661 <211> 468 420

<212> PRT

<213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1661 Arg Xaa Thr Thr Ser Gly Thr Leu Asp Phe Asp Glu Val Val Asn Asp 10 Ala Asp Ile Ile Leu Val Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Lys Leu Ala Pro Glu Tyr Glu Lys Ala Ala Lys Glu Leu Ser Lys Arg Ser Pro Pro Ile Pro Leu Ala Lys Val Asp Ala Thr Ala Glu Thr 50 55 60 Asp Leu Ala Lys Arg Phe Asp Val Ser Gly Tyr Pro Thr Leu Lys Ile Phe Arg Lys Gly Arg Pro Tyr Asp Tyr Asn Gly Pro Arg Glu Lys Tyr Gly Ile Val Asp Tyr Met Ile Glu Gln Ser Gly Pro Pro Ser Lys Glu 100 105 Ile Leu Thr Leu Lys Gln Val Gln Glu Phe Leu Lys Asp Gly Asp Asp 120 Val Ile Ile Gly Val Phe Lys Gly Glu Ser Asp Pro Ala Tyr Gln 135 Gln Tyr Gln Asp Ala Ala Asn Asn Leu Arg Glu Asp Tyr Lys Phe His 145 150 His Thr Phe Ser Thr Glu Ile Ala Lys Phe Leu Lys Val Ser Gln Gly 170 Gln Leu Val Val Met Gln Pro Glu Lys Phe Gln Ser Lys Tyr Glu Pro 185 Arg Ser His Met Met Asp Val Gln Gly Ser Thr Gln Asp Ser Ala Ile 195

200

215

210

Lys Asp Phe Val Leu Lys Tyr Ala Leu Pro Leu Val Gly His Arg Lys

Val Ser Asn Asp Ala Lys Arg Tyr Thr Arg Arg Pro Leu Val Val Val

225					230					235					240
Tyr	Tyr	Ser	Val	Asp 245	Phe	Ser	Phe	Asp	Tyr 250	Arg	Ala	Ala	Thr	Gln 255	Phe
Trp	Arg	Ser	Lys 260	Val	Leu	Glu	Val	Ala 265	Lys	Asp	Phe	Pro	Glu 270	туr	Thr
Phe	Ala	Ile 275	Ala	Asp	Glu	Glu	Asp 280	Tyr	Ala	Gly	Glu	Val 285	Lys	Asp	Leu
Gly	Leu 290	Ser	Glu	Ser	Gly	Glu 295	Asp	Val	Asn	Ala	Ala 300	Ile	Leu	Asp	Glu
Ser 305	Gly	Lys	Lys	Phe	Ala 310	Met	Glu	Pro	Glu	Glu 315	Phe	Asp	Ser	Asp	Thr 320
Leu	Arg	Glu	Phe	Val 325	Thr	Ala	Phe	Lys	Lys 330	Gly	Lys	Leu	Lys	Pro 335	Val
Ile	Lys	Ser	Gln 340	Pro	Val	Pro	Lys	Asn 345	Asn	Lys	Gly	Pro	Val 350	Lys	Val
Val	Val	Gly 355	Lys	Thr	Phe	Asp	Ser 360	Ile	Val	Met	Asp	Pro 365	Lys	Lys	Asp
Val	Leu 370	Ile	Glu	Phe	Tyr	Ala 375	Pro	Trp	Cys	Gly	His 380	Cys	Lys	Gln	Leu
Glu 385	Pro	Val	Tyr	Asn	Ser 390	Leu	Ala	Lys	Lys	Tyr 395	Lys	Gly	Gln	Lys	Gly 400
Leu	Val	Ile	Ala	Lys 405	Met	Asp	Ala	Thr	Ala 410	Asn	Asp	Val	Pro	Ser 415	Asp
Arg	Tyr	Lys	Val 420	Glu	Gly	Phe	Pro	Thr 425	Ile	Tyr	Phe	Ala	Pro 430	Ser	Gly
Asp	Lys	Lys 435	Asn	Pro	Val	Lys	Phe 440	Glu	Gly	Gly	Asp	Arg 445	Asp	Leu	Glu
His	Leu 450	Ser	Lys	Phe	Ile	Glu 455	Glu	His	Ala	Thr	Lys 460	Leu	Ser	Arg	Thr
Lys 465	Glu	Glu	Leu												

<210> 1662 <211> 355

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (262) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1662 Ala Ala Gly Ile Arg Xaa Arg Arg Gly Gly Cys Lys Met Pro Leu Pro Val Gln Val Phe Asn Leu Gln Gly Ala Val Glu Pro Met Gln Ile Asp Val Asp Pro Gln Glu Asp Pro Gln Asn Ala Pro Asp Val Asn Tyr Val 40 Val Glu Asn Pro Ser Leu Asp Leu Glu Gln Tyr Ala Ala Ser Tyr Ser 55 Gly Leu Met Arg Ile Glu Arg Leu Gln Phe Ile Ala Asp His Cys Pro 65 70 Thr Leu Arg Val Glu Ala Leu Lys Met Ala Leu Ser Phe Val Gln Arg Thr Phe Asn Val Asp Met Tyr Glu Glu Ile His Arg Lys Leu Ser Glu 105 Ala Thr Arg Glu Leu Gln Asn Ala Pro Asp Ala Ile Pro Glu Ser Gly 115 120 Val Glu Pro Pro Ala Leu Asp Thr Ala Trp Val Glu Ala Thr Arg Lys 135 Lys Ala Leu Leu Lys Leu Glu Lys Leu Asp Thr Asp Leu Lys Asn Tyr 150 155 Lys Gly Asn Ser Ile Lys Glu Ser Ile Arg Arg Gly His Asp Asp Leu 165 170 Gly Asp His Tyr Leu Asp Cys Gly Asp Leu Ser Asn Ala Leu Lys Cys 180 185

Tyr Ser Arg Ala Arg Asp Tyr Cys Thr Ser Ala Lys His Val Ile Asn

195 200 205

Met Cys Leu Asn Val Ile Lys Val Ser Val Tyr Leu Gln Asn Trp Ser 210 215 220

His Val Leu Ser Tyr Val Ser Lys Ala Glu Ser Thr Pro Glu Ile Ala 225 230 235 240

Glu Gln Arg Gly Glu Arg Asp Ser Gln Thr Gln Ala Ile Leu Thr Lys
245
250
255

Leu Lys Cys Ala Ala Xaa Trp Gln Ser Trp Pro Pro Gly Ser Thr Ser 260 265 270

Arg Leu Pro Ser Ala Ser Cys Trp Leu Pro Leu Ile Thr Val Thr Ser 275 280 285

Leu Ser Cys Cys Pro Pro Ala Thr Trp Pro Ser Thr Val Ala Cys Ala 290 295 300

Pro Trp Leu Pro Leu Thr Gly Arg Ser Cys Ser Ala Met Ser Ser Pro 305 310 315 320

Ala Ala Pro Ser Ser Cys Ser Trp Ser Trp Ser His Arg Ser Glu Thr
325 330 335

Ser Ser Ser Asn Ser Thr Ser Pro Ser Thr Pro His Val Ser Arg Cys 340 345 350

Trp Thr Arg

<210> 1663

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1663

Leu Ser His Leu Ser Leu Leu Asn Ser Trp Asp Tyr Arg Cys Met Leu 1 5 10 15

Pro Cys Leu Ala Thr Phe Cys Val Phe Ser Arg Asp Arg Val Ser Pro 20 25 30

Cys Trp Ser Gly Trp Ser Arg Thr Pro Asp Leu Lys Trp Ser Val Trp 35 40 45

Leu Gly Leu Pro Arg Cys Trp Asp Tyr Arg Cys Glu Pro Leu His Leu 50 55 60 Ala Tyr Ile Gly Phe Phe Leu Lys Pro Ile 65 70

<210> 1664

<211> 485

<212> PRT

<213> Homo sapiens

<400> 1664

Pro Gly Ser Ile Leu Arg Glu Thr Gly Leu Gly Cys Asp Ala Ala Ala 1 5 10 15

Gly Val Arg Met Ser Tyr Pro Gly Tyr Pro Pro Thr Gly Tyr Pro Pro 20 25 30

Phe Pro Gly Tyr Pro Pro Ala Gly Gln Glu Ser Ser Phe Pro Pro Ser 35 40 45

Gly Gln Tyr Pro Tyr Pro Ser Gly Phe Pro Pro Met Gly Gly Gly Ala
50 55 60

Tyr Pro Gln Val Pro Ser Ser Gly Tyr Pro Gly Ala Gly Gly Tyr Pro 65 70 75 80

Ala Pro Gly Gly Tyr Pro Ala Pro Gly Gly Tyr Pro Gly Ala Pro Gln \$85\$ 90 95

Pro Gly Gly Ala Pro Ser Tyr Pro Gly Val Pro Pro Gly Gln Gly Phe
100 105 110

Gly Val Pro Pro Gly Gly Ala Gly Phe Ser Gly Tyr Pro Gln Pro Pro 115 120 125

Ser Gln Ser Tyr Gly Gly Pro Ala Gln Val Pro Leu Pro Gly Gly 130 135 140

Phe Pro Gly Gly Gln Met Pro Ser Gln Tyr Pro Gly Gly Gln Pro Thr 145 150 155 160

Tyr Pro Ser Gln Pro Ala Thr Val Thr Gln Val Thr Gln Gly Thr Ile 165 170 175

Arg Pro Ala Ala Asn Phe Asp Ala Ile Arg Asp Ala Glu Ile Leu Arg 180 185 190

Lys Ala Met Lys Gly Phe Gly Thr Asp Glu Gln Ala Ile Val Asp Val 195 200 205

Val	Ala 210	Asn	Arg	Ser	Asn	Asp 215		Arg	Gln	Lys	11e 220		Ala	Ala	Phe
Lys 225		Ser	Tyr	Gly	Lys 230	Asp	Leu	Ile	Lys	Asp 235		Lys	Ser	Glu	Leu 240
Ser	Gly	Asn	Met	Glu 245	Glu	Leu	Ile	Leu	Ala 250	Leu	Phe	Met	Pro	Pro 255	Thr
Tyr	Туr	Asp	Ala 260	Trp	Ser	Leu	Arg	Lys 265	Ala	Met	Gln	Gly	Ala 270	Gly	Thr
Gln	Glu	Arg 275	Val	Leu	Ile	Glu	Ile 280	Leu	Cys	Thr	Arg	Thr 285	Asn	Gln	Glu
Ile	Arg 290	Glu	Ile	Val	Arg	Cys 295	Tyr	Gln	Ser	Glu	Phe 300	Gly	Arg	Asp	Leu
305					Ser 310					315					320
				325	Gly				330					335	
			340		Asp			345					350		-
		355			Glu		360					365			·
Ser	Phe 370	Pro	Gln	Leu	Arg	Ala 375	Thr	Met	Glu	Ala	Туг 380	Ser	Arg	Met	Ala
385					Ser 390					395			-	-	400
				405	Thr				410					415	
			420		Leu			425					430		-
		435			Arg		440					445		-	
	450				Met	455					460				_
Thr 465	Met	Ile	Ala	Gly	Asp 470	Thr	Ser	Gly	Asp	Tyr 475	Arg	Arg	Leu	Leu	Leu 480

Ala Ile Val Gly Gln 485

<210> 1665

<211> 235

<212> PRT

<213> Homo sapiens

<400> 1665

Arg Asn Val Ile Glu Ala Cys Leu Gln Thr Gly Thr Arg Phe Leu Val
1 5 10 15

Tyr Thr Ser Ser Met Glu Val Val Gly Pro Asn Thr Lys Gly His Pro
20 25 30

Phe Tyr Arg Gly Asn Glu Asp Thr Pro Tyr Glu Ala Val His Arg His 35 40 45

Pro Tyr Pro Cys Ser Lys Ala Leu Ala Glu Trp Leu Val Leu Glu Ala 50 55 60

Asn Gly Arg Lys Val Arg Gly Gly Leu Pro Leu Val Thr Cys Ala Leu 65 70 75 80

Arg Pro Thr Gly Ile Tyr Gly Glu Gly His Gln Ile Met Arg Asp Phe 85 90 95

Tyr Arg Gln Gly Leu Arg Leu Gly Gly Trp Leu Phe Arg Ala Ile Pro 100 105 110

Ala Ser Val Glu His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met 115 120 125

His Val Leu Ala Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly
130 135 140

Gly Gln Val Tyr Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu 145 150 155 160

Asp Phe Asn Met Glu Phe Leu Gly Pro Leu Arg Thr Ala Ala Gly Gly 165 170 175

Arg Pro Pro Ile Ala Ala Leu Leu Ala Ala Gly Val Pro Gly Cys Pro 180 185 190

Gln Cys Pro Ala Ala Val Ala Ala Ala Ala Thr Gly Ala Leu Arg Thr
195 200 205

Pro Ala Glu Pro Leu His Ala Gly Arg Gly Gln His His Leu His Arg

210 215 220

Gln His Arg Gln Gly Ser Ala Pro Phe Arg Leu 225 230 235

<210> 1666

<211> 292

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1666

Ala Ala Leu Glu Gly Pro Glu Glu Glu Leu Glu Gly Ser Ser Glu Pro

1 5 10 15

Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His Leu Thr Glu Pro 20 25 30

Ser Ser Ser Gly Gly Cys Leu Val Thr Pro Ser Arg Arg Glu Thr Pro 35 40 45

Ser Pro Thr Pro Ser Tyr Gly Gln Gln Ser Thr Ala Thr Leu Thr Pro 50 55 60

Ser Pro Pro Asp Pro Pro Gln Pro Pro Thr Asp Met Pro His Leu His 65 70 75 80

Gln Met Pro Arg Xaa Val Pro Leu Gly Pro Ser Ser Pro Leu Ser Val 85 90 95

Ser Gln Pro Met Leu Gly Ile Arg Glu Ala Arg Pro Ala Gly Leu Gly
100 105 110

Ala Gly Pro Ala Ala Ser Pro His Leu Ser Pro Ser Pro Ala Pro Ser 115 120 125

Thr Ala Ser Ser Ala Pro Gly Arg Thr Trp Gln Gly Asn Gly Glu Met 130 135 140

Thr Pro Pro Leu Gln Gly Pro Arg Ala Arg Phe Arg Lys Lys Pro Lys 145 150 155 160

Ala Leu Pro Tyr Arg Arg Glu Asn Ser Pro Gly Asp Leu Pro Pro Pro 165 170 175

Pro Leu Pro Pro Glu Glu Glu Ala Ser Trp Ala Leu Glu Leu Arg 180 185 190

Ala Ala Gly Ser Met Ser Ser Leu Glu Arg Glu Arg Ser Gly Glu Arg
195 200 205

Lys Ala Val Gln Ala Val Pro Leu Ala Ala Gln Arg Val Leu His Pro 210 215 220

Asp Glu Glu Ala Trp Leu Pro Tyr Ser Arg Pro Ser Phe Leu Ser Arg 225 230 235 240

Gly Gln Gly Thr Ser Thr Cys Ser Thr Ala Gly Ser Asn Ser Ser Arg
245 250 255

Gly Ser Ser Ser Arg Gly Ser Arg Gly Pro Gly Arg Ser Arg Ser 260 265 270

Arg Ser Gln Ser Arg Ser Gln Ser Gln Arg Pro Gly Gln Lys Arg Arg 275 280 285

Glu Glu Pro Arg 290

<210> 1667

<211> 521

<212> PRT

<213> Homo sapiens

<400> 1667

Lys Trp Lys Ser Gly Lys Asp Val Asp Ile Ser Leu Leu Val Ser Phe 1 5 10 15

Asn Lys Met Lys Lys Leu Thr Thr Asp Gly Lys Leu Ile Ala Arg Ala
20 25 30

Leu Arg Ser Ser Ala Val Val Glu Leu Asp Leu Glu Gly Thr Arg Ile

Arg Arg Lys Lys Pro Leu Gly Glu Arg Pro Lys Asp Glu Asp Glu Arg
50 55 60

Thr Val Tyr Val Glu Leu Leu Pro Lys Asn Val Asn His Ser Trp Ile 65 70 75 80

Glu Arg Val Phe Gly Lys Cys Gly Asn Val Val Tyr Ile Ser Ile Pro 85 90 95

His Tyr Lys Ser Thr Gly Asp Pro Lys Gly Phe Ala Phe Val Glu Phe

100 105 110 Glu Thr Lys Glu Gln Ala Ala Lys Ala Ile Glu Phe Leu Asn Asn Pro 120 Pro Glu Glu Ala Pro Arg Lys Pro Gly Ile Phe Pro Lys Thr Val Lys 135 Asn Lys Pro Ile Pro Ala Leu Arg Val Val Glu Glu Lys Lys Lys 155 Lys Lys Lys Gly Arg Met Lys Lys Glu Asp Asn Ile Gln Ala Lys 165 170 Glu Glu Asn Met Asp Thr Ser Asn Thr Ser Ile Ser Lys Met Lys Arg 180 185 Ser Arg Pro Thr Ser Glu Gly Ser Asp Ile Glu Ser Thr Glu Pro Gln 200 Lys Gln Cys Ser Lys Lys Lys Lys Arg Asp Arg Val Glu Ala Ser 210 Ser Leu Pro Glu Val Arg Thr Gly Lys Arg Lys Arg Ser Ser Ser Glu 230 235 Asp Ala Glu Ser Leu Ala Pro Arg Ser Lys Val Lys Lys Ile Ile Gln 245 250 Lys Asp Ile Ile Lys Glu Ala Ser Glu Ala Ser Lys Glu Asn Arg Asp 260 265 Ile Glu Ile Ser Thr Glu Glu Glu Lys Asp Thr Gly Asp Leu Lys Asp 280 Ser Ser Leu Leu Lys Thr Lys Arg Lys His Lys Lys His Lys Glu 295 Arg His Lys Met Gly Glu Glu Val Ile Pro Leu Arg Val Leu Ser Lys 305 310 315 Ser Glu Trp Met Asp Leu Lys Lys Glu Tyr Leu Ala Leu Gln Lys Ala 325 Ser Met Ala Ser Leu Lys Lys Thr Ile Ser Gln Ile Lys Ser Glu Ser 345 Glu Met Glu Thr Asp Ser Gly Val Pro Gln Asn Thr Gly Met Lys Asn 360 365 Glu Lys Thr Ala Asn Arg Glu Glu Cys Arg Thr Gln Glu Lys Val Asn

370 375 380 Ala Thr Gly Pro Gln Phe Val Ser Gly Val Ile Val Lys Ile Ile Ser 395 Thr Glu Pro Leu Pro Gly Arg Lys Gln Val Arg Asp Thr Leu Ala Ala 405 410 Ile Ser Glu Val Leu Tyr Val Asp Leu Leu Glu Gly Asp Thr Glu Cys His Ala Arg Phe Lys Thr Pro Glu Asp Ala Gln Ala Val Ile Asn Ala 440 Tyr Thr Glu Ile Asn Lys Lys His Cys Trp Lys Leu Glu Ile Leu Ser 450 455 Gly Asp His Glu Gln Arg Tyr Trp Gln Lys Ile Leu Val Asp Arg Gln 470 475 Ala Lys Leu Asn Gln Pro Arg Glu Lys Lys Arg Gly Thr Glu Lys Leu Ile Thr Lys Ala Glu Lys Ile Arg Leu Ala Lys Thr Gln Gln Ala Ser 500 Lys His Ile Arg Phe Ser Glu Tyr Asp 515 520 <210> 1668 <211> 306 <212> PRT <213> Homo sapiens Phe Pro Glu Leu Ser Gly Arg Arg Ala Lys Ala Lys Gly Val Trp Arg Ala Ala Pro Gly Ala Asn Met Pro Arg Tyr Ala Gln Leu Val Met Gly 25 Pro Ala Gly Ser Gly Lys Ser Thr Tyr Cys Ala Thr Met Val Gln His 35 40 Cys Glu Ala Leu Asn Arg Ser Val Gln Val Val Asn Leu Asp Pro Ala 55

Ala Glu His Phe Asn Tyr Ser Val Met Ala Asp Ile Arg Glu Leu Ile

75

70

Gly Gly Leu Val Phe Cys Met Glu Tyr Phe Ala Asn Asn Phe Asp Trp 105 Leu Glu Asn Cys Leu Gly His Val Glu Asp Asp Tyr Ile Leu Phe Asp 115 Cys Pro Gly Gln Ile Glu Leu Tyr Thr His Leu Pro Val Met Lys Gln 135 Leu Val Gln Gln Leu Glu Gln Trp Glu Phe Arg Val Cys Gly Val Phe 150 155 Leu Val Asp Ser Gln Phe Met Val Glu Ser Phe Lys Phe Ile Ser Gly 165 Ile Leu Ala Ala Leu Ser Ala Met Ile Ser Leu Glu Ile Pro Gln Val 180 185 Asn Ile Met Thr Lys Met Asp Leu Leu Ser Lys Lys Ala Lys Lys Glu 200 Ile Glu Lys Phe Leu Asp Pro Asp Met Tyr Ser Leu Leu Glu Asp Ser 210 215 Thr Ser Asp Leu Arg Ser Lys Lys Phe Lys Lys Leu Thr Lys Ala Ile 230 235

Glu Val Asp Asp Val Met Glu Asp Asp Ser Leu Arg Phe Gly Pro Asn

Gln Ser Asp Glu Glu Ser Met Asn Ile Val Leu Gln His Ile Asp Phe 260 265 270

Cys Gly Leu Ile Asp Asp Tyr Ser Met Val Arg Phe Leu Pro Tyr Asp

Ala Ile Gln Tyr Gly Glu Asp Leu Glu Phe Lys Glu Pro Lys Glu Arg 275 280 285

Glu Asp Glu Ser Ser Ser Met Phe Asp Glu Tyr Phe Gln Glu Cys Gln 290 295 300

Asp Glu 305

<210> 1669

<211> 412

<212> PRT

<213> Homo sapiens

<400> 1669

Glu Thr Glu Asp Val Met Glu Leu Leu Glu Glu Asp Leu Thr Cys Pro

1 5 10 15

Ile Cys Cys Ser Leu Phe Asp Asp Pro Arg Val Leu Pro Cys Ser His 20 25 30

Asn Phe Cys Lys Lys Cys Leu Glu Gly Ile Leu Glu Gly Ser Val Arg
35 40 45

Asn Ser Leu Trp Arg Pro Ala Pro Phe Lys Cys Pro Thr Cys Arg Lys
50 55 60

Glu Thr Ser Ala Thr Gly Ile Asn Ser Leu Gln Val Asn Tyr Ser Leu 65 70 75 80

Lys Gly Ile Val Glu Lys Tyr Asn Lys Ile Lys Ile Ser Pro Lys Met 85 90 95

Pro Val Cys Lys Gly His Leu Gly Gln Pro Leu Asn Ile Phe Cys Leu 100 105 110

Thr Asp Met Gln Leu Ile Cys Gly Ile Cys Ala Thr Arg Gly Glu His
115 120 125

Thr Lys His Val Phe Cys Ser Ile Glu Asp Ala Tyr Ala Gln Glu Arg 130 135 140

Asp Ala Phe Glu Ser Leu Phe Gln Ser Phe Glu Thr Trp Arg Arg Gly
145 150 155 160

Asp Ala Leu Ser Arg Leu Asp Thr Leu Glu Thr Ser Lys Arg Lys Ser 165 170 175

Leu Gln Leu Leu Thr Lys Asp Ser Asp Lys Val Lys Glu Phe Phe Glu 180 185 190

Lys Leu Gln His Thr Leu Asp Gln Lys Lys Asn Glu Ile Leu Ser Asp 195 200 205

Phe Glu Thr Met Lys Leu Ala Val Met Gln Ala Tyr Asp Pro Glu Ile 210 215 220

Asn Lys Leu Asn Thr Ile Leu Gln Glu Gln Arg Met Ala Phe Asn Ile
225 230 235 240

Ala Glu Ala Phe Lys Asp Val Ser Glu Pro Ile Val Phe Leu Gln Gln 245 250 255

Met Gln Glu Phe Arg Glu Lys Ile Lys Val Ile Lys Glu Thr Pro Leu 260 265 270

Pro Pro Ser Asn Leu Pro Ala Ser Pro Leu Met Lys Asn Phe Asp Thr 275 280 285

Ser Gln Trp Glu Asp Ile Lys Leu Val Asp Val Asp Lys Leu Ser Leu 290 295 300

Pro Gln Asp Thr Gly Thr Phe Ile Ser Lys Ile Pro Trp Ser Phe Tyr 305 310 315 320

Lys Leu Phe Leu Leu Ile Leu Leu Gly Leu Val Ile Val Phe Gly 325 330 335

Pro Thr Met Phe Leu Glu Trp Ser Leu Phe Asp Asp Leu Ala Thr Trp 340 345 350

Lys Gly Cys Leu Ser Asn Phe Ser Ser Tyr Leu Thr Lys Thr Ala Asp 355 360 365

Phe Ile Glu Gln Ser Val Phe Tyr Trp Glu Gln Val Thr Asp Gly Phe 370 380

Phe Ile Phe Asn Glu Arg Phe Lys Asn Phe Thr Leu Val Val Leu Asn 385 390 395 400

Asn Val Ala Glu Phe Val Cys Lys Tyr Lys Leu Leu 405 410

<210> 1670

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1670

Pro Glu Glu Ala Leu Glu Pro Glu Ala Met Ala His Tyr Pro Thr Arg

1 5 10 15

Leu Lys Thr Arg Lys Thr Tyr Ser Trp Val Gly Arg Pro Leu Leu Asp
20 25 30

Arg Lys Leu His Tyr Gln Thr Tyr Arg Glu Met Cys Val Lys Thr Glu
35 40 45

Gly Cys Ser Thr Glu Ile His Ile Gln Ile Gly Gln Phe Val Leu Ile 50 55 60

Glu Gly Asp Asp Asp Glu Asn Pro Tyr Val Ala Lys Leu Leu Glu Leu

65 70 75 80

Phe Glu Asp Asp Ser Asp Pro Pro Pro

<210> 1671

<211> 218

<212> PRT

<213> Homo sapiens

<400> 1671

Asp Pro Arg Val Arg Ile Glu Ile Ile Thr Asp Arg Gln Ser Gly Lys

1 5 10 15

Lys Arg Gly Phe Gly Phe Val Thr Phe Asp Asp His Asp Pro Val Asp 20 25 30

Lys Ile Val Leu Gln Lys Tyr His Thr Ile Asn Gly His Asn Ala Glu 35 40 45

Val Arg Lys Ala Leu Ser Arg Gln Glu Met Gln Glu Val Gln Ser Ser 50 55 60

Arg Ser Gly Arg Gly Gly Asn Phe Gly Phe Gly Asp Ser Arg Gly Gly 65 70 75 80

Gly Gly Asn Phe Gly Pro Gly Pro Gly Ser Asn Phe Arg Gly Gly Ser 85 90 95

Asp Gly Tyr Gly Ser Gly Arg Gly Phe Gly Asp Gly Tyr Asn Gly Tyr 100 105 110

Gly Gly Pro Gly Gly Gly Asn Phe Gly Gly Ser Pro Gly Tyr Gly
115 120 125

Gly Gly Arg Gly Gly Tyr Gly Gly Gly Gly Pro Gly Tyr Gly Asn Gln 130 135 140

Gly Gly Tyr Gly Gly Gly Tyr Asp Asn Tyr Gly Gly Gly Asn Tyr 145 150 155 160

Gly Ser Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Asn Gln Gln Pro Ser 165 170 175

Asn Tyr Gly Pro Met Lys Ser Gly Asn Phe Gly Gly Ser Arg Asn Met 180 185 190

Gly Gly Pro Tyr Gly Gly Gly Asn Tyr Gly Pro Gly Gly Ser Gly Gly
195 200 205

Ser Gly Gly Tyr Gly Gly Arg Ser Arg Tyr 210 215

<210> 1672

<211> 575

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (555)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672

Glu Glu Leu Arg Val Arg Glu His Val Thr Gly Gly Ile Cys Gly Gly
1 5 10 15

Ser Gln Met Met Val Val Leu Leu Gly Ala Thr Thr Leu Val Leu Val 20 25 30

Ala Val Ala Pro Trp Val Leu Ser Ala Ala Ala Gly Gly Lys Asn Leu 35 40

Lys Ser Pro Gln Lys Val Glu Val Asp Ile Ile Asp Asp Asn Phe Ile 50 55 60

Leu Arg Trp Asn Arg Ser Asp Glu Ser Val Gly Asn Val Thr Phe Ser 65 70 75 80

Phe Asp Tyr Gln Lys Thr Gly Met Asp Asn Trp Ile Lys Leu Ser Gly 85 90 95

Cys Gln Asn Ile Thr Ser Thr Lys Cys Asn Phe Ser Ser Leu Lys Leu 100 105 110

Asn Val Tyr Glu Glu Ile Lys Leu Arg Ile Arg Ala Glu Lys Glu Asn 115 120 125

Thr Ser Ser Trp Tyr Glu Val Asp Ser Phe Thr Pro Phe Arg Lys Ala 130 135 140

Gln Ile Gly Pro Pro Glu Val His Leu Glu Ala Glu Asp Lys Ala Ile 145 150 155 160

Val	Ile	His	: Ile	Ser 165		Gly	Thr	Lys	170		Val	Met	Trp	Ala 175	Leu
Asp	Gly	Leu	Ser 180		Thr	Tyr	Ser	Leu 185		Ile	Trp	Lys	Asn 190		Ser
Gly	Val	Glu 195		Arg	Ile	Glu	Asn 200		Tyr	Ser	Arg	His 205		Ile	Tyr
Lys	Leu 210	Ser	Pro	Glu	Thr	Thr 215		Cys	Leu	Lys	Val 220	Lys	Ala	Ala	Leu
Leu 225	Thr	Ser	Trp	Lys	Ile 230	Gly	Val	Tyr	Ser	Pro 235	Val	His	Cys	Ile	Lys 240
Thr	Thr	Val	Glu	Asn 245	Glu	Leu	Pro	Pro	Pro 250		Asn	Ile	Glu	Val 255	Ser
Val	Gln	Asn	Gln 260	Asn	Tyr	Val	Leu	Lys 265	Trp	Asp	Tyr	Thr	Tyr 270	Ala	Asn
Met	Thr	Phe 275	Gln	Val	Gln	Trp	Leu 280	His	Ala	Phe	Leu	Lys 285	Arg	Asn	Pro
Gly	Asn 290	His	Leu	Tyr	Lys	Trp 295	Lys	Gln	Ile	Pro	Asp 300	Cys	Glu	Asn	Val
Lys 305	Thr	Thr	Gln	Cys	Val 310	Phe	Pro	Gln	Asn	Val 315	Phe	Gln	Lys	Gly	Ile 320
Tyr	Leu	Leu	Arg	Val 325	Gln	Ala	Ser	Asp	Gly 330	Asn	Asn	Thr	Ser	Phe 335	Trp
Ser	Glu	Glu	Ile 340	Lys	Phe	Asp	Thr	Glu 345	Ile	Gln	Ala	Phe	Leu 350	Leu	Pro
Pro	Val	Phe 355	Asn	Ile	Arg	Ser	Leu 360	Ser	Asp	Ser	Phe	His 365	Ile	Tyr	Ile
Gly	Ala 370	Pro	Lys	Gln	Ser	Gly 375	Asn	Thr	Pro	Val	Ile 380	Gln	Asp	Tyr	Pro
Leu 385	Ile	Tyr	Glu	Ile	Ile 390	Phe	Trp	Glu	Asn	Thr 395	Ser	Asn	Ala	Glu	Arg 400
Lys	Ile	Ile	Glu	Lys 405	Lys	Thr	Asp	Val	Thr 410	Val	Pro	Asn	Leu	Lys 415	Pro
Leu	Thr	Val	Tyr 420	Cys	Val	Lys	Ala	Arg 425	Ala	His	Thr	Met	Asp 430	Glu	Lys

Leu Asn Lys Ser Ser Val Phe Ser Asp Ala Val Cys Glu Lys Thr Lys
435 440 445

Pro Gly Asn Thr Ser Lys Ile Trp Leu Ile Val Gly Ile Cys Ile Ala 450 455 460

Leu Phe Ala Leu Pro Phe Val Ile Tyr Ala Ala Lys Val Phe Leu Arg
465 470 475 480

Cys Ile Asn Tyr Val Phe Phe Pro Ser Leu Lys Pro Ser Ser Ser Ile 485 490 495

Asp Glu Tyr Phe Ser Glu Gln Pro Leu Lys Asn Leu Leu Leu Ser Thr 500 505 510

Ser Glu Glu Gln Ile Glu Lys Cys Phe Ile Ile Glu Asn Ile Ser Thr 515 520 525

Ile Ala Thr Val Glu Glu Thr Asn Gln Thr Asp Glu Asp His Lys Lys 530 535 540

Tyr Ser Ser Gln Thr Ser Gln Asp Ser Gly Xaa Tyr Ser Asn Glu Asp 545 550 555 560

Glu Ser Glu Ser Lys Thr Ser Glu Glu Leu Gln Gln Asp Phe Val
565 570 575

<210> 1673

<211> 571

<212> PRT

<213> Homo sapiens

<400> 1673

Asp Ala Trp Glu Leu Ser Arg Gly Gly Pro Phe Glu Arg Ile Ala Leu
1 5 10 15

Gln Pro Leu Ile Pro Pro Ala Ser Pro Pro Val Glu Ala Gln Ala Arg 20 25 30

Phe Ala Ala Phe Ser Leu Cys Leu Ile Thr Met Ser Thr Asn Glu Asn 35 40 45

Ala Asn Thr Pro Ala Ala Arg Leu His Arg Phe Lys Asn Lys Gly Lys 50 55 60

Asp Ser Thr Glu Met Arg Arg Arg Ile Glu Val Asn Val Glu Leu 65 70 75 80

WO 00/55174 1525 PCT/US00/05988

Arg	Lys	Ala	Lys	Lys 85	Asp	Asp	Gln	Met	Leu 90		Arg	Arg	Asn	Val 95	Ser
Ser	Phe	Pro	Asp 100	Asp	Ala	Thr	Ser	Pro 105	Leu	Gln	Glu	Asn	Arg 110	Asn	Asn
Gln	Gly	Thr 115	Val	Asn	Trp	Ser	Val 120	Asp	Asp	Ile	Val	Lys 125	Gly	Ile	Asn
Ser	Ser 130	Asn	Val	Glu	Asn	Gln 135	Leu	Gln	Ala	Thr	Gln 140	Ala	Ala	Arg	Lys
Leu 145	Leu	Ser	Arg	Glu	Lys 150	Gln	Pro	Pro	Ile	Asp 155	Asn	Ile	Ile	Arg	Ala 160
Gly	Leu	Ile	Pro	Lys 165	Phe	Val	Ser	Phe	Leu 170	Gly	Arg	Thr	Asp	Cys 175	Ser
Pro	Ile	Gln	Phe 180	Glu	Ser	Ala	Trp	Ala 185	Leu	Thr	Asn	Ile	Ala 190	Ser	Gly
Thr	Ser	Glu 195	Gln	Thr	Lys	Ala	Val 200	Val	Asp	Gly	Gly	Ala 205	Ile	Pro	Ala
Phe	11e 210	Ser	Leu	Leu	Ala	Ser 215	Pro	His	Ala	His	Ile 220	Ser	Glu	Gln	Ala
Val 225	Trp	Ala	Leu	Gly	Asn 230	Ile	Ala	Gly	Asp	Gly 235	Ser	Val	Phe	Arg	Asp 240
Leu	Val	Ile	Lys	Tyr 245	Gly	Ala	Val	Asp	Pro 250	Leu	Leu	Ala	Leu	Leu 255	Ala
Val	Pro	Asp	Met 260	Ser	Ser	Leu	Ala	Cys 265	Gly	Tyr	Leu	Arg	Asn 270	Leu	Thr
Trp	Thr	Leu 275	Ser	Asn	Leu	Cys	Arg 280	Asn	Lys	Asn	Pro	Ala 285	Pro	Pro	Ile
Asp	Ala 290	Val	Glu	Gln		Leu 295	Pro	Thr	Leu	Val	Arg 300	Leu	Leu	His	His
Asp 305	Asp	Pro	Glu	Val	Leu 310	Ala	Asp	Thr	Cys	Trp 315	Ala	Ile	Ser	Tyr	Leu 320
Thr	Asp	Gly		Asn 325	Glu	Arg	Ile		Met 330	Val	Val	Lys	Thr	Gly 335	Val
Val	Pro	Gln	Leu 340	Val	Lys	Leu	Leu	Gly 345	Ala	Ser	Glu	Leu	Pro 350	Ile	Val

Thr Pro Ala Leu Arg Ala Ile Gly Asn Ile Val Thr Gly Thr Asp Glu 355 360 365

Gln Thr Gln Val Val Ile Asp Ala Gly Ala Leu Ala Val Phe Pro Ser 370 380

Leu Leu Thr Asn Pro Lys Thr Asn Ile Gln Lys Glu Ala Thr Trp Thr 385 390 395 400

Met Ser Asn Ile Thr Ala Gly Arg Gln Asp Gln Ile Gln Gln Val Val
405 410 415

Asn His Gly Leu Val Pro Phe Leu Val Ser Val Leu Ser Lys Ala Asp 420 425 430

Phe Lys Thr Gln Lys Glu Ala Val Trp Ala Val Thr Asn Tyr Thr Ser 435 440 445

Gly Gly Thr Val Glu Gln Ile Val Tyr Leu Val His Cys Gly Ile Ile 450 455 460

Glu Pro Leu Met Asn Leu Leu Thr Ala Lys Asp Thr Lys Ile Ile Leu 465 470 475 480

Val Ile Leu Asp Ala Ile Ser Asn Ile Phe Gln Ala Ala Glu Lys Leu
485 490 495

Gly Glu Thr Glu Lys Leu Ser Ile Met Ile Glu Glu Cys Gly Gly Leu 500 505 510

Asp Lys Ile Glu Ala Leu Gln Asn His Glu Asn Glu Ser Val Tyr Lys 515 520 525

Ala Ser Leu Ser Leu Ile Glu Lys Tyr Phe Ser Val Glu Glu Glu Glu 530 535 540

Asp Gln Asn Val Val Pro Glu Thr Thr Ser Glu Gly Tyr Thr Phe Gln 545 550 555 560

Val Gln Asp Gly Ala Pro Gly Thr Phe Asn Phe 565 570

<210> 1674

<211> 375

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (338) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (340) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (356) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (372) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1674 Ser Glu Pro Leu Gly Arg Phe Leu Leu Phe Arg Arg Leu His Ser Val 10 Pro Arg Gly Ser Ala Leu Cys Ala Met Asp Gly Ile Val Pro Asp Ile 20 25 Ala Val Gly Thr Lys Arg Gly Ser Asp Glu Leu Phe Ser Thr Cys Val Thr Asn Gly Pro Phe Ile Met Ser Ser Asn Ser Ala Ser Ala Ala Asn Gly Asn Asp Ser Lys Lys Phe Lys Gly Asp Ser Arg Ser Ala Gly Val 65 70 75 Pro Ser Arg Val Ile His Ile Arg Lys Leu Pro Ile Asp Val Thr Glu 90 Gly Glu Val Ile Ser Leu Gly Leu Pro Phe Gly Lys Val Thr Asn Leu 105 Leu Met Leu Lys Gly Lys Asn Gln Ala Phe Ile Glu Met Asn Thr Glu 115 120 Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro Val 130 135 Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu Leu 150 155 Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu Gln 165 170

Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser Ala 180 185 190

Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val Leu 195 200 205

Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val Leu 210 220

His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr Phe 225 230 235 240

Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro Val 245 250 255

Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr Asn 260 265 270

Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu Asn 275 280 285

Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp Leu 290 295 300

Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala Ala 305 310 315 320

Phe Gly Ala Pro Gly Ile Ile Ser Ala Ser Pro Tyr Ala Gly Ala Gly 325 330 335

Phe Xaa Pro Xaa Phe Ala Ile Pro Gln Ala Ala Gly Phe Pro Phe Arg 340 345 350

Thr Ser Thr Xaa Pro Trp Pro Leu Ala Arg Thr Glu Pro Arg Trp Leu 355 360 365

Leu Ile Ala Xaa Gly Thr Ala 370 375

<210> 1675

<211> 193

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (190)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1675

Pro Arg Phe Ser Val Phe Cys Ser Arg Leu Arg Arg Glu Arg Arg 1 5 10 15

Arg Trp Arg Leu Arg Arg Glu Thr Ala Arg Arg Ser Glu Arg Ala Leu 20 25 30

Arg Leu Pro Pro Pro Gln Gln Arg Arg Arg Arg Arg His Arg Ser Ser 35 40 45

Pro Asp Arg Ser Arg Ser Leu Pro Ser Pro Ala Ile Arg Ala Pro Leu 50 55 60

Pro Asp Leu Tyr Pro Phe Gly Thr Met Arg Gly Gly Gly Phe Gly Asp
65 70 75 80

Arg Asp Arg Asp Arg Gly Gly Phe Gly Ala Arg Gly Gly 85 90 95

Gly Leu Pro Pro Lys Lys Phe Gly Asn Pro Gly Glu Arg Leu Arg Lys
100 105 110

Lys Lys Trp Asp Leu Ser Glu Leu Pro Lys Phe Glu Lys Asn Phe Tyr 115 120 125

Val Glu His Pro Glu Val Ala Arg Leu Thr Pro Tyr Glu Val Asp Glu 130 135 140

Leu Arg Arg Lys Lys Glu Ile Thr Val Arg Gly Gly Asp Val Cys Pro 145 150 155 160

Lys Pro Val Phe Ala Phe His His Ala Asn Phe Pro Gln Tyr Val Met 165 170 175

Asp Val Leu Met Asp Ser Arg Thr Leu Gln Asp Asn Ile Xaa Gly Arg 180 185 190

Leu

<210> 1676

<211> 365

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (220)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1676

His Glu Gly Met Phe Pro Pro Phe Lys Val Arg Cys Ser Gly Leu Asp
1 5 10 15

Lys Lys Ala Lys Tyr Ile Leu Leu Met Asp Ile Ile Ala Ala Asp Asp 20 25 30

Cys Arg Tyr Lys Phe His Asn Ser Arg Trp Met Val Ala Gly Xaa Ala 35 40 45

Asp Pro Glu Met Pro Lys Arg Met Tyr Ile His Pro Asp Ser Pro Ala 50 55 60

Thr Gly Glu Gln Trp Met Ser Lys Val Val Thr Phe His Lys Leu Lys 65 70 75 80

Leu Thr Asn Asn Ile Ser Asp Lys His Gly Phe Thr Leu Ala Phe Pro 85 90 95

Ser Asp His Ala Thr Trp Gln Gly Asn Tyr Ser Phe Gly Thr Gln Thr 100 105 110

Ile Leu Asn Ser Met His Lys Tyr Gln Pro Arg Phe His Ile Val Arg 115 120 125

Ala Asn Asp Ile Leu Lys Leu Pro Tyr Ser Thr Phe Arg Thr Tyr Leu 130 135 140

Phe Pro Glu Thr Glu Phe Ile Ala Val Thr Ala Tyr Gln Asn Asp Lys 145 150 155 160

Ile Thr Gln Leu Lys Ile Asp Asn Asn Pro Phe Ala Lys Gly Phe Arg 165 170 175

Asp Thr Gly Asn Gly Arg Arg Glu Lys Arg Lys Gln Leu Thr Leu Gln 180 185 190

Ser Met Arg Val Phe Asp Glu Arg His Lys Lys Glu Asn Gly Thr Ser 195 200 205

Asp Glu Ser Ser Ser Glu Gln Ala Ala Phe Asn Xaa Phe Ala Gln Ala 210 215 220

Ser Ser Pro Ala Ala Ser Thr Val Gly Thr Ser Asn Leu Lys Asp Leu

225 230 235 240 Cys Pro Ser Glu Gly Glu Ser Asp Ala Glu Ala Glu Ser Lys Glu Glu 245 250 His Gly Pro Glu Ala Cys Asp Ala Ala Lys Ile Ser Thr Thr Thr Ser 265 Glu Glu Pro Cys Arg Asp Lys Gly Ser Pro Ala Val Lys Ala His Leu 280 Phe Ala Ala Glu Arg Pro Arg Asp Ser Gly Arg Leu Asp Lys Ala Ser 290 Pro Asp Ser Arg His Ser Pro Ala Thr Ile Ser Ser Ser Thr Arg Gly 310 315 Leu Gly Ala Glu Glu Arg Arg Ser Pro Val Arg Glu Gly Thr Ala Pro 325 330 Ala Lys Val Glu Glu Ala Arg Ala Leu Pro Gly Lys Glu Ala Phe Ala 340 Pro Leu Thr Val Gln Thr Asp Ala Ala Ala Ser Leu Phe 355 360 <210> 1677 <211> 668 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1677 His Met Val Leu Arg Pro Phe Leu Leu Arg Arg Ile Lys Ala Asp Val Glu Lys Ser Leu Pro Pro Lys Lys Glu Val Lys Ile Tyr Val Gly Leu 20 Ser Lys Met Gln Arg Glu Trp Tyr Thr Arg Ile Leu Met Lys Asp Ile

35 40 45 Asp Ile Leu Asn Ser Ala Gly Lys Met Asp Lys Met Arg Leu Leu Asn 55 Ile Leu Met Gln Leu Xaa Xaa Cys Cys Asn His Pro Tyr Leu Phe Asp Gly Ala Glu Pro Gly Pro Pro Tyr Thr Thr Asp Met His Leu Val Thr 90 Asn Ser Gly Lys Met Val Val Leu Asp Lys Leu Leu Pro Lys Leu Lys 100 Glu Gln Gly Ser Arg Val Leu Ile Phe Ser Gln Met Thr Arg Val Leu 120 Asp Ile Leu Glu Asp Tyr Cys Met Trp Arg Asn Tyr Glu Tyr Cys Arg 135 Leu Asp Gly Gln Thr Pro His Asp Glu Arg Gln Asp Ser Ile Asn Ala 145 150 Tyr Asn Glu Pro Asn Ser Thr Lys Phe Val Phe Met Leu Ser Thr Arg 165 170 Ala Gly Gly Leu Gly Ile Asn Leu Ala Thr Ala Asp Val Val Ile Leu 185 Tyr Asp Ser Asp Trp Asn Pro Gln Val Asp Leu Gln Ala Met Asp Arg 195 200 Ala His Arg Ile Gly Gln Thr Lys Thr Val Arg Val Phe Arg Phe Ile 215 Thr Asp Asn Thr Val Glu Glu Arg Ile Val Glu Arg Ala Glu Met Lys 230 235 Leu Arg Leu Asp Ser Ile Val Ile Gln Gln Gly Arg Leu Val Asp Gln 245 . 250 Asn Leu Asn Lys Ile Gly Lys Asp Glu Met Leu Gln Met Ile Arg His 260 265 Gly Ala Thr His Val Phe Ala Ser Lys Glu Ser Glu Ile Thr Asp Glu 280 Asp Ile Asp Gly Ile Leu Glu Arg Gly Ala Lys Lys Thr Ala Glu Met

295

Asn Glu Lys Leu Ser Lys Met Gly Glu Ser Ser Leu Arg Asn Phe Thr

290

305 310 315 320 Met Asp Thr Glu Ser Ser Val Tyr Asn Phe Glu Gly Glu Asp Tyr Arg 325 Glu Lys Gln Lys Ile Ala Phe Thr Glu Trp Ile Glu Pro Pro Lys Arg Glu Arg Lys Ala Asn Tyr Ala Val Asp Ala Tyr Phe Arg Glu Ala Leu 360 Arg Val Ser Glu Pro Lys Ala Pro Lys Ala Pro Arg Pro Pro Lys Gln 370 375 Pro Asn Val Gln Asp Phe Gln Phe Phe Pro Pro Arg Leu Phe Glu Leu 390 Leu Glu Lys Glu Ile Leu Phe Tyr Arg Lys Thr Ile Gly Tyr Lys Val 405 410 Pro Arg Asn Pro Glu Leu Pro Asn Ala Ala Gln Ala Gln Lys Glu Glu 420 425 Gln Leu Lys Ile Asp Glu Ala Glu Ser Leu Asn Asp Glu Glu Leu Glu 440 Glu Lys Glu Lys Leu Leu Thr Gln Gly Phe Thr Asn Trp Asn Lys Arg 455 Asp Phe Asn Gln Phe Ile Lys Ala Asn Glu Lys Trp Gly Arg Asp Asp 465 470 Ile Glu Asn Ile Ala Arg Glu Val Glu Gly Lys Thr Pro Glu Glu Val 490 Ile Glu Tyr Ser Ala Val Phe Trp Glu Arg Cys Asn Glu Leu Gln Asp 505 Ile Glu Lys Ile Met Ala Gln Ile Glu Arg Gly Glu Ala Arg Ile Gln 515 520 Arg Arg Ile Ser Ile Lys Lys Ala Leu Asp Thr Lys Ile Gly Arg Tyr 535 Lys Ala Pro Phe His Gln Leu Arg Ile Ser Tyr Gly Thr Asn Lys Gly 545 550 555 Lys Asn Tyr Thr Glu Glu Glu Asp Arg Phe Leu Ile Cys Met Leu His 565 570 Lys Leu Gly Phe Asp Lys Glu Asn Val Tyr Asp Glu Leu Arg Gln Cys

580 585 590

Ile Arg Asn Ser Pro Gln Phe Arg Phe Asp Trp Phe Leu Lys Ser Arg
595 600 605

Thr Ala Met Glu Leu Gln Arg Arg Cys Asn Thr Leu Ile Thr Leu Ile 610 620

Glu Arg Glu Asn Met Glu Leu Glu Glu Lys Glu Lys Ala Glu Lys Lys 625 630 635 640

Lys Arg Gly Pro Lys Pro Ser Thr Gln Lys Arg Lys Met Asp Gly Ala 645 650 655

Pro Asp Gly Arg Gly Arg Lys Lys Leu Lys Leu 660 665

<210> 1678

<211> 237

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1678

Gly Arg Lys Arg Pro Leu Pro Xaa Lys Gly Trp Ser Arg Ala Gly Ala 1 5 10 15

Met Trp Ser Ala Gly Arg Gly Gly Ala Ala Trp Pro Val Leu Leu Gly $20 \hspace{1cm} 25 \hspace{1cm} 30$

Leu Leu Leu Ala Leu Leu Val Pro Gly Gly Gly Ala Ala Lys Thr Gly 35 40 45

Ala Glu Leu Val Thr Cys Gly Ser Val Leu Lys Leu Leu Asn Thr His 50 55 60

His Arg Val Arg Leu His Ser His Asp Ile Lys Tyr Gly Ser Gly Ser 65 70 75 80

Gly Gln Gln Ser Val Thr Gly Val Glu Ala Ser Asp Asp Ala Asn Ser 85 90 95

Tyr Trp Arg Ile Arg Gly Gly Ser Glu Gly Gly Cys Pro Arg Gly Ser 100 105 110

Pro Val Arg Cys Gly Gln Ala Val Arg Leu Thr His Val Leu Thr Gly 120 Lys Asn Leu His Thr His His Phe Pro Ser Pro Leu Ser Asn Asn Gln 135 140 Glu Val Ser Ala Phe Gly Glu Asp Gly Glu Gly Asp Asp Leu Asp Leu 150 155 Trp Thr Val Arg Cys Ser Gly Gln His Trp Glu Arg Glu Ala Ala Val 165 170 Arg Phe Gln His Val Gly Thr Ser Val Phe Leu Ser Val Thr Gly Glu 185 Gln Tyr Gly Ser Pro Ile Arg Gly Gln His Glu Val His Gly Met Pro 195 200 Ser Ala Asn Thr His Asn Thr Trp Lys Ala Met Glu Gly Ile Phe Ile 210 215 Lys Pro Ser Val Glu Pro Ser Ala Gly His Asp Glu Leu 230 <210> 1679 <211> 168 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids Glu His Tyr Ser Cys Phe Leu Phe Gln Asn Pro Thr Pro His Pro Ser 5 15

Cys Asp Ala Met Ser Thr Asn Ile Cys Ser Phe Lys Asp Arg Cys Val

20 25 30

Ser Ile Leu Cys Cys Lys Phe Cys Lys Gln Val Leu Ser Ser Arg Gly 35 40 45

Met Lys Ala Val Leu Leu Ala Asp Thr Glu Ile Asp Leu Phe Ser Thr 50 55 60

Asp Ile Pro Pro Thr Asn Ala Val Asp Phe Thr Gly Arg Cys Tyr Phe 65 70 75 80

Thr Lys Ile Cys Lys Cys Lys Leu Lys Asp Ile Ala Cys Leu Lys Cys
85
90
95

Gly Asn Ile Val Xaa Tyr His Val Ile Val Pro Cys Ser Ser Cys Leu 100 105 110

Leu Ser Cys Asn Asn Xaa His Phe Trp Met Phe His Ser Gln Ala Val 115 120 125

Tyr Asp Ile Asn Arg Leu Asp Ser Thr Gly Val Asn Val Leu Leu Xaa 130 135 140

Gly Asn Leu Pro Glu Ile Glu Glu Ser Thr Asp Glu Asp Val Leu Asn 145 150 155 160

Ile Ser Ala Glu Glu Cys Ile Arg 165

<210> 1680

<211> 519

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (321)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (332)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (333)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (337) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (511) <223> Xaa equals any of the naturally occurring L-amino acids Lys Thr Glu Arg Lys Gln Glu Gly Arg Ser Leu Leu Phe Glu Phe Val Ala Arg Glu Ala Leu Gln Ser Gly Leu Ala Leu Gly Tyr Trp Leu Gly Pro Met Leu Gly Thr Leu Arg Ala Met Glu Gly Glu Asp Val Glu Asp Asp Gln Leu Leu Gln Lys Leu Arg Ala Ser Arg Arg Arg Phe Gln Arg 50 55 Arg Met Gln Arg Leu Ile Glu Lys Tyr Asn Gln Pro Phe Glu Asp Thr 75 Pro Val Val Gln Met Ala Thr Leu Thr Tyr Glu Thr Pro Gln Gly Leu 90 Arg Ile Trp Gly Gly Arg Leu Ile Lys Glu Arg Asn Lys Gly Glu Ile 100 105 Gln Asp Ser Ser Met Lys Pro Ala Asp Arg Thr Asp Gly Ser Val Gln 120 Ala Ala Arp Gly Pro Glu Leu Pro Ser His Arg Thr Val Leu Gly 130 135 Ala Asp Ser Lys Ser Gly Glu Val Asp Ala Thr Ser Asp Gln Glu Glu 145 150 155 Ser Val Ala Trp Ala Leu Ala Pro Ala Val Pro Gln Ser Pro Leu Lys 170 Asn Glu Leu Arg Arg Lys Tyr Leu Thr Gln Val Asp Ile Leu Leu Gln 180 185 Gly Ala Glu Tyr Phe Glu Cys Ala Gly Asn Arg Ala Gly Arg Asp Val 195 200 205

Arg Val Thr Pro Leu Pro Ser Leu Ala Ser Pro Ala Val Pro Ala Pro

	210)				215	;				220	ı			
Gly 225		Cys	s Sei	Arq	1le 230		Gly	Lys	Ser	Pro 235		Asp	Pro	Ala	Lys 240
Pro	Ala	a Ser	Ser	245		Glu	Trp	· Asp	Pro 250		His	Pro	Ser	Ser 255	Thr
Asp	Met	: Ala	Leu 260		. Pro	Arg	Asn	Asp 265		Leu	Ser	Leu	Gln 270	Glu	Thr
Ser	Ser	Ser 275		Phe	Leu	ser	Ser 280	Gln	Pro	Phe	Glu	Asp 285	Asp	Asp	Ile
Cys	Asn 290		Thr	Ile	Ser	Asp 295	Leu	Tyr	Ala	Gly	Met 300	Leu	His	Ser	Met
Ser 305	Arg	Leu	Leu	Ser	Thr 310	Lys	Pro	Ser	Ser	Ile 315	Ile	Ser	Thr	Lys	Thr 320
Xaa	Ile	Met	Gln	Asn 325	Trp	Asn	Ser	Arg	Arg 330	Arg	Xaa	Xaa	Tyr	Lys 335	Ser
Xaa	Met	Asn	Lys 340	Thr	Tyr	Cys	Lys	Gly 345	Ala	Arg	Arg	Ser	Gln 350	Arg	Ser
Ser	Lys	Glu 355	Asn	Phe	Ile	Pro	Cys 360	Ser	Glu	Pro	Val	Lys 365	Gly	Thr	Gly
Ala	Leu 370	Arg	Asp	Суѕ	Lys	Asn 375	Val	Leu	Asp	Val	Ser 380	Cys	Arg	Lys	Thr
Gly 385	Leu	Lys	Leu	Glu	Lys 390	Ala	Phe	Leu	Glu	Val 395	Asn	Arg	Pro	Gln	Ile 400
His	Lys	Leu	Asp	Pro 405	Ser	Trp	Lys	Glu	Arg 410	Lys	Val	Thr	Pro	Ser 415	Lys
Tyr	Ser	Ser	Leu 420	Ile	Tyr	Phe	Asp	Ser 425	Ser	Ala	Thr	Tyr	Asn 430	Leu	Asp
Glu	Glu	Asn 435	Arg	Phe	Arg	Thr	Leu 440	Lys	Trp	Leu	Ile	Ser 445	Pro	Val	Lys
Ile	Val 450	Ser	Arg	Pro		Ile 455	Arg	Gln	Gly		Gly 460	Glu	Asn	Arg	Gln
Arg 465	Glu	Ile	Glu	Ile	Arg 470	Phe	Asp	Gln		His 475	Arg	Glu	Tyr	_	Leu 480
Ser	Pro	Arg	Asn	Gln	Pro	Arg	Arg	Met	Cys	Leu	Pro	Asp	Ser	Trp	Ala

485 490 495

Met Asn Met Tyr Arg Gly Gly Pro Ala Lys Ser Trp Trp Pro Xaa Gly 500 505 510

Leu Lys Thr Arg Lys Leu Ser 515

<210> 1681

<211> 371

<212> PRT

<213> Homo sapiens

<400> 1681

Val Pro Cys Tyr Arg Arg Val Phe Ile Val Ser Ser Ser Gln Leu Gly

1 5 10 15

Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu Thr Val Met Asp 20 25 30

Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro Leu Met Thr Ala 35 40 45

Ala Val Leu Gly Thr Arg Gly Glu Asp Val Asp Gln Leu Val Ala Cys 50 55 60

Ile Glu Ser Lys Leu Pro Val Leu Cys Cys Thr Leu Gln Leu Arg Glu 65 70 75 80

Glu Phe Lys Gln Glu Val Glu Ala Thr Ala Gly Leu Leu Tyr Val Asp 85 90 95

Asp Pro Asn Trp Ser Gly Ile Gly Val Val Arg Tyr Glu His Ala Asn 100 105 110

Asp Asp Lys Ser Ser Leu Lys Ser Asp Pro Glu Gly Glu Asn Ile His 115

Ala Gly Leu Leu Lys Lys Leu Asn Glu Leu Glu Ser Asp Leu Thr Phe 130 135 140

Lys Ile Gly Pro Glu Tyr Lys Ser Met Lys Ser Cys Leu Tyr Val Gly 145 150 155 160

Met Ala Ser Asp Asn Val Asp Ala Ala Glu Leu Val Glu Thr Ile Ala 165 170 175

Ala Thr Ala Arg Glu Ile Glu Glu Asn Ser Arg Leu Leu Glu Asn Met 180 185 190 Thr Glu Val Val Arg Lys Gly Ile Gln Glu Ala Gln Val Glu Leu Gln 195 200 205

Lys Ala Ser Glu Glu Arg Leu Leu Glu Glu Gly Val Leu Arg Gln Ile 210 215 220

Pro Val Val Gly Ser Val Leu Asn Trp Phe Ser Pro Val Gln Ala Leu 225 230 235 240

Gln Lys Gly Arg Thr Phe Asn Leu Thr Ala Gly Ser Leu Glu Ser Thr 245 250 255

Glu Pro Ile Tyr Val Tyr Lys Ala Gln Gly Ala Gly Val Thr Leu Pro
260 265 270

Pro Thr Pro Ser Gly Ser Arg Thr Lys Gln Arg Leu Pro Gly Gln Lys
275
280
285

Pro Phe Lys Arg Ser Leu Arg Gly Ser Asp Ala Leu Ser Glu Thr Ser 290 295 300

Ser Val Ser His Ile Glu Asp Leu Glu Lys Val Glu Arg Leu Ser Ser 305 310 315 320

Gly Pro Glu Gln Ile Thr Leu Glu Ala Ser Ser Thr Glu Gly His Pro 325 330 335

Gly Ala Pro Ser Pro Gln His Thr Asp Gln Thr Glu Ala Phe Gln Lys 340 345 350

Gly Val Pro His Pro Glu Asp Asp His Ser Gln Val Glu Gly Pro Glu 355 360 365

Ser Leu Arg 370

<210> 1682

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

```
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1682
Ser Xaa Arg Gly Thr Ser Pro Ser Glu Phe Tyr Phe Met Phe Gln Gln
                                    10
Val Arg Val Lys Pro Gln Asp Phe Ala Ala Ile Thr Ile Pro Arg Ser
Arg Gly Glu Ala Arg Val Gly Ala Gly Phe Arg Pro Met Leu Pro Ser
                             40
Gln Gly Ala Pro Gln Arg Pro Leu Ser Thr Phe Ser Pro Ala Pro Lys
                       55
Ala Thr Leu Ile Xaa Asn Ser Ile Gly Ser Leu Ser Lys Leu Arg Pro
 65
                    70
Gln Pro Leu Thr Phe Ser Pro Ser Trp Gly Gly Pro Lys Ser Leu Pro
                                     90
Val Pro Ala Pro Pro Gly Glu Met Gly Thr Thr Pro Ser Ala Pro Pro
                               105
Gln Arg Asn Arg Arg Lys Ser Val His Arg Val Leu Ala Glu Leu Asp
        115
                           120
Asp Glu Ser Glu Pro Pro Glu Asn Pro Pro Pro Val Leu Met Glu Pro
                       135
Xaa Lys Lys Leu Arg Val Asp Lys Ala Pro Leu Thr Pro Thr Gly Asn
                   150
                                       155
Arg Arg Gly Arg Pro Arg Lys Tyr Pro Val Ser Ala Pro Met Ala Pro
               165
                                  170
```

Pro Ala Val Gly Gly Glu Pro Cys Ala Ala Pro Cys Cys Cys Leu 180 185 190

Pro Gln Glu Glu Thr Val Ala Trp Val Gln Cys Asp Gly Cys Asp Val 195 200 205

Trp Phe His Val Ala Cys Xaa Gly Cys Ser Ile Gln Ala Ala Arg Glu 210 215 220

Ala Asp Phe Xaa Cys Pro Gly Cys Arg Ala Gly Ile Gln Thr 225 230 235

<210> 1683

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1683

Met Ile Ala Thr Glu Thr Gln Ser Ser Phe Phe Ala Arg Val Phe Trp

1 5 10 15

Gly Phe Cys Pro Lys Ile Tyr Pro Gly His Ser Ile Thr Ala Val Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Asp Val Tyr Pro Lys Leu Pro His His Pro Ser Thr His Ser Cys Thr 35 40 45

Phe Ile Tyr Leu Phe Cys Ser Ser Leu Gly Asp Arg Val Arg Leu Arg 50 55 60

Leu Gly

<210> 1684

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1684

Trp Pro Leu Glu Phe Val Trp Pro Pro Pro Arg Glu Arg Glu Pro Gly
1 5 10 15

Asn Phe Ser Thr Glu Lys Gly Glu Ala Phe Gly Leu Cys Arg Val Arg 20 25 30

Val Ser Lys Cys Pro Ala Pro Ala Gly Met Glu Asp Pro Gln Ser Lys

35 40 45

Glu Pro Ala Gly Glu Ala Val Ala Leu Ala Leu Leu Glu Ser Pro Arg
50 55 60

Pro Glu Gly Gly Glu Glu Pro Pro Arg Pro Ser Pro Glu Glu Thr Gln 65 70 75 80

Gln Cys Lys Phe Asp Gly Gln Glu Thr Lys Gly Ser Lys Phe Ile Thr 85 90 95

Ser Ser Ala Ser Asp Phe Ser Asp Pro Val Tyr Lys Glu Ile Ala Ile 100 105 110

Thr Asn Gly Cys Ile Asn Arg 115

<210> 1685

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1685

Ile Val Phe Leu Pro Glu Asp Ser Tyr Leu His Val Ser Gln Gly Leu 1 5 10 15

Gln Phe Phe Tyr Lys Phe Pro Tyr Pro Lys Phe Arg Ile His Val Lys
20 25 30

Tyr Phe Phe Gly Ala Lys Val Leu His Ser Trp Tyr Leu Leu Asp Trp 35 40 45

Lys Ser Val Ala Arg Cys Cys Leu Lys Leu Pro Tyr Cys Phe Phe Ile 50 60

Leu Tyr Leu Ala Leu Trp Leu Leu Asn Phe Leu Phe Leu Phe Glu Val 65 70 75 80

Ser Phe Lys Phe Ala Pro Met Leu Asn Tyr Leu 85 90

<210> 1686

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1686

, , , , ,

Glu Ala Val Ala Glu Val Ser Ser Leu Phe Pro Arg Leu Phe Gln Ile 1 5 10 15

Phe Val Ile Ala Val Val Ser Leu Val Ile Leu Pro Arg Ile Val Ile 20 25 30

Phe Arg Arg Met Ala Cys Tyr Asn Cys Gly Arg Gly Gly His Ile Ala 35 40 45

Lys Asp Cys Lys Glu Pro Lys Arg Glu Arg Glu Gln Cys Cys Tyr Asn 50 55 60

Cys Gly Lys Pro Gly His Leu Ala Arg Asp Cys Asp His Ala Asp Glu 65 70 75 80

Gln Lys Cys Tyr Ser Cys Gly Glu Phe Gly His Ile Gln Lys Asp Cys 85 90 95

Thr Lys Val Lys Cys Tyr Arg Cys Gly Glu Thr Gly His Val Ala Ile 100 105 110

Asn Cys Ser Lys Thr Ser Glu Val Asn Cys Tyr Arg Cys Gly Glu Ser 115 120 125

Gly His Leu Ala Arg Glu Cys Thr Ile Glu Ala Thr Ala 130 135 140

<210> 1687

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1687

Phe Trp Ile Pro Trp Trp Arg Lys Ile Lys His Ser Gly Leu Ala Ala 1 5 10 15

Asn Asp Ala Ser Val Thr Ala Gly Val Phe Met Ser Ser Arg Gly His
20 25 30

Ser Thr Leu Pro Arg Thr Leu Met Ala Pro Arg Met Ile Ser Glu Gly
35 40 45

Asp Ile Gly Gly Ile Ala Gln Ile Thr Ser Ser Leu Phe Leu Gly Arg
50 55 60

Gly Ser Val Ala Ser Asn Arg His Leu Leu Gln Ala Arg Gly His His 65 70 75 80

Leu His Cys

<210> 1688 <211> 153 <212> PRT <213> Homo sapiens

<400> 1688

Arg Arg His Pro Ala Val Val Ala Glu Val Ser Pro Ala Tyr Phe Leu 1 5 10 15

Phe Pro Ser Glu Arg Ala Ala Ala Leu Ala Ala Cys Ala Ala Met Ala 20 25 30

Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys Glu Glu Leu Leu 35 40

Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser Gln Leu Arg Val Ala 50 55 60

Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser Lys Ile Arg Val Val 65 70 75 80

Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile Asn Gln Thr Gln Lys 85 90 95

Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys Tyr Lys Pro Leu Asp 100 105 110

Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg Arg Leu Asn Lys His 115 120 125

Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg Lys Glu Arg Leu Tyr 130 135 140

Pro Leu Arg Lys Tyr Ala Val Lys Ala 145 150

<210> 1689 <211> 130

<212> PRT

<213> Homo sapiens

<400> 1689

Gly Gly Gly Asp Ala Glu Met Gly Ala Ala Ala Glu Ala Asp Arg
1 5 10 15

Thr Leu Phe Val Gly Asn Leu Glu Thr Lys Val Thr Glu Glu Leu Leu 20 25 30

Phe Glu Leu Phe His Gln Ala Gly Pro Val Ile Lys Val Lys Ile Pro 35 40 45

Lys Asp Lys Asp Gly Lys Pro Lys Gln Phe Ala Phe Val Asn Phe Lys 50 60

His Glu Val Ser Val Pro Tyr Ala Met Asn Leu Leu Asn Gly Ile Lys
65 70 75 80

Leu Tyr Gly Arg Pro Ile Lys Ile Gln Phe Arg Ser Gly Ser Ser His
85 90 95

Ala Pro Gln Asp Val Ser Leu Ser Tyr Pro Gln His His Val Gly Asn 100 105 110

Ser Ser Pro Thr Ser Thr Ser Pro Ser Ala Gly Thr Lys Gly Leu Trp
115 120 125

Ile Thr 130

<210> 1690

<211> 172

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1690

Arg Pro Ser Leu Glu Val Leu Phe Thr Val Ile Leu Thr Lys Ile Thr 1 5 10 15

Tyr Cys Pro Pro Glu Tyr Gln Val Leu Gly Asp Thr Ser Ser Cys
20 25 30

Cys Leu Gln Ser Ser Tyr Gln Glu Ala Arg Cys Thr Gly Phe Leu Trp
35 40 45

Phe Leu Gln Glu Pro Pro Thr Leu Ser Val Phe Trp Pro Arg Ser Gly
50 55 60

Val Asn Pro Leu Val Ser Ala Phe Glu Leu Asp Thr Cys Ala Phe Ser 65 70 75 80

Ser Val Asn Thr Ala Leu Phe Gly Gly Val Ser Ser Ser Pro Gln Pro 85 90 95

Glu Leu Leu Asn Ser Lys Pro Lys Leu Val Ser Ala Glu Xaa Arg Phe 100 105 110

Gln Asp Ser Pro Val Ser Ile Cys Gly Asp Leu Gln Ile Arg Gln Ser 115 120 125

Ser Phe Pro Ala Ser Gly Val Leu Ala Pro Glu Pro Ser Leu Arg Leu 130 135 140

Val Leu Leu Asp Val Leu Ile Ser Asp His Tyr Pro Pro Tyr Ala Ser 145 150 155 160

His Arg Pro Arg Glu Asn Arg His Gln Asn Leu Gly 165 170

<210> 1691

<211> 272

<212> PRT

<213> Homo sapiens

<400> 1691

Asn Ser Arg Val His Pro Arg Arg Pro Val Thr Ala Glu Lys Met Ala 1 5 10 15

Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro Arg Leu Ser 20 25 30

Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala Leu Leu Ser Ala 35 40 45

Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu Cys His Gly Leu Pro 50 55 60

Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp Phe Asp Trp Arg Glu Val 65 70 75 80

Glu Ile Leu Met Phe Leu Ser Ala Ile Val Met Met Lys Asn Arg Arg
85 90 95

Ser Met Phe Leu Met Thr Cys Lys Pro Pro Leu Tyr Met Gly Pro Glu 100 105 110

Tyr Ile Lys Tyr Phe Asn Asp Lys Thr Ile Asp Glu Glu Leu Glu Arg 115 120 125

,,

Asp Lys Arg Val Thr Trp Ile Val Glu Phe Phe Ala Asn Trp Ser Asn 130 135 140

Asp Cys Gln Ser Phe Ala Pro Ile Tyr Ala Asp Leu Ser Leu Lys Tyr 145 150 155 160

Asn Cys Thr Gly Leu Asn Phe Gly Lys Val Asp Val Gly Arg Tyr Thr 165 170 175

Asp Val Ser Thr Arg Tyr Lys Val Ser Thr Ser Pro Leu Thr Lys Gln 180 185 190

Leu Pro Thr Leu Ile Leu Phe Gln Gly Gly Lys Glu Ala Met Arg Arg
195 200 205

Pro Gln Ile Asp Lys Lys Gly Arg Ala Val Ser Trp Thr Phe Ser Glu 210 215 220

Glu Asn Val Ile Arg Glu Phe Asn Leu Asn Glu Leu Tyr Gln Arg Ala 225 230 235 240

Lys Lys Leu Ser Lys Ala Gly Asp Asn Ile Pro Glu Glu Gln Pro Val 245 250 255

Ala Ser Thr Pro Thr Thr Val Ser Asp Gly Glu Asn Lys Lys Asp Lys 260 265 270

<210> 1692

<211> 366

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1692

Gly Lys Arg Thr Gly Arg Ala Xaa Ala Ser Ser Gly Arg Arg Gly Glu

1 5 10 15

Gly Gly Trp Trp Arg Leu Pro Arg Ser Pro Ser Leu Pro Ala Val Pro 20 25 30

Thr Pro Gly Thr Met Phe Pro Ala Gly Pro Pro Ser His Ser Leu Leu 35 40 45

-1

Arg Leu Pro Leu Leu Gln Leu Leu Leu Val Val Gln Ala Val Gly 55 Arg Gly Leu Gly Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val 70 Val Ile Glu Arg Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln Met Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Phe Glu Asp Gly 105 Lys Lys Phe Asp Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val 115 120 Val Gly Val Gly Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly Met Cys Val Asn Glu Arg Arg Leu Ile Val Pro Pro His Leu Gly 150 155 Tyr Gly Ser Ile Gly Leu Ala Gly Leu Ile Pro Pro Asp Ala Thr Leu 165 170 Tyr Phe Asp Val Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val 185 Gln Val Ser Thr Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln 200 Asp Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly 210 Thr Ser Phe Asp Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr 230 235 Val Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly 250 Met Cys Pro Gly Glu Arg Arg Lys Ile Ile Pro Pro Phe Leu Ala 260 Tyr Gly Glu Lys Gly Tyr Gly Glu Gly Gln Gly His Lys Gly Lys 280 Phe Arg Arg Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly 295 Cys Ile Leu His Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys 305 310 320

Ser Thr Leu Gly Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp 325 330 335

Leu Thr Leu Val Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser 340 345 350

Arg Gly Gln Glu Ile Glu Thr Thr Val Lys Pro Arg Leu Tyr 355 360 365

<210> 1693

<211> 361

<212> PRT

<213> Homo sapiens

<400> 1693

Leu Pro Gln Ser Arg Trp Asn Lys Ser Ser Thr Pro Asp Gly Val Pro
1 5 10 15

Thr Leu Cys Cys Arg Asn Glu Ala Arg Gln Gln Ile Ser Ile Ser Arg 20 25 30

Met Trp Gly Leu Lys Val Leu Leu Leu Pro Val Val Ser Phe Ala Leu 35 40 45

Tyr Pro Glu Glu Ile Leu Asp Thr His Trp Glu Leu Trp Lys Lys Thr
50 55 60

His Arg Lys Gln Tyr Asn Asn Lys Val Asp Glu Ile Ser Arg Arg Leu 65 70 75 80

Ile Trp Glu Lys Asn Leu Lys Tyr Ile Ser Ile His Asn Leu Glu Ala 85 90 95

Ser Leu Gly Val His Thr Tyr Glu Leu Ala Met Asn His Leu Gly Asp 100 105 110

Met Thr Ser Glu Glu Val Val Gln Lys Met Thr Gly Leu Lys Val Pro 115 120 125

Leu Ser His Ser Arg Ser Asn Asp Thr Leu Tyr Ile Pro Glu Trp Glu 130 135 140

Gly Arg Ala Pro Asp Ser Val Asp Tyr Arg Lys Lys Gly Tyr Val Thr 145 150 155 160

Pro Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ser 165 170 175 Val Gly Ala Leu Glu Gly Gln Leu Lys Lys Lys Thr Gly Lys Leu Leu 180 185 190

Asn Leu Ser Pro Gln Asn Leu Val Asp Cys Val Ser Glu Asn Asp Gly
195 200 205

Cys Gly Gly Gly Tyr Met Thr Asn Ala Phe Gln Tyr Val Gln Lys Asn 210 215 220

Arg Gly Ile Asp Ser Glu Asp Ala Tyr Pro Tyr Val Gly Gln Glu Glu 225 230 235 240

Ser Cys Met Tyr Asn Pro Thr Gly Lys Ala Ala Lys Cys Arg Gly Tyr
245 250 255

Arg Glu Ile Pro Glu Gly Asn Glu Lys Ala Leu Lys Arg Ala Val Ala 260 265 270

Arg Val Gly Pro Val Ser Val Ala Ile Asp Ala Ser Leu Thr Ser Phe 275 280 285

Gln Phe Tyr Ser Lys Gly Val Tyr Tyr Asp Glu Ser Cys Asn Ser Asp 290 295 300

Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly 305 310 315 320

Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn 325 330 335

Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile 340 345 350

Ala Asn Leu Ala Ser Phe Pro Lys Met 355 360

<210> 1694

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1694

Pro Arg Val Arg Arg Gly Pro Arg Val Ser Ser Met Ala Ser Ala Asp 1 5 10 15 Ser Arg Arg Xaa Ala Asp Gly Gly Gly Ala Gly Gly Thr Phe Gln Pro 20 25 30

Tyr Leu Asp Thr Leu Arg Gln Glu Leu Gln Gln Thr Asp Pro Thr Leu 35 40 45

Leu Ser Val Val Val Ala Val Leu Ala Val Leu Leu Thr Leu Val Phe 50 55 60

Trp Lys Leu Ile Arg Ser Arg Arg Ser Ser Gln Arg Ala Val Leu Leu 65 70 75 80

Val Gly Leu Cys Asp Ser Gly Lys Thr Leu Leu Phe Val Arg Leu Leu 85 90 95

Thr Gly Leu Tyr Arg Asp Thr Gln Thr Ser Ile Thr Asp Ser Cys Ala 100 105 110

Val Tyr Arg Val Asn Asn Asn Arg Gly Asn Ser Leu Thr Leu Ile Asp 115 120 125

Leu Pro Gly His Glu Ser Leu Arg Leu Gln Phe Leu Glu Arg Phe Lys 130 135 140

Ser Ser Ala Arg Ala Ile Val Phe Val Val Asp Ser Ala Ala Phe Gln 145 150 155 160

Arg Glu Val Lys Asp Val Ala Glu Phe Leu Tyr Gln Val Leu Ile Asp 165 170 175

Ser Met Gly Leu Lys Asn Thr Pro Ser Phe Leu Ile Ala Cys Asn Lys 180 185 190

Gln Asp Ile Ala Met Ala Lys Ser Ala Lys Leu Ile Gln Gln Gln Leu 195 200 205

Glu Lys Glu Leu Asn Thr Leu Arg Val Thr Arg Ser Ala Ala Pro Ser 210 220

Thr Leu Asp Ser Ser Ser Thr Ala Pro Ala Gln Leu Gly Lys Lys Gly 235 230 240

Lys Glu Phe Glu Phe Ser Gln Leu Pro Leu Lys Val Glu Phe Leu Glu 245 250 255

Cys Ser Ala Lys Gly Gly Arg Gly Asp Val Gly Ser Ala Asp Ile Gln 260 265 270

Asp Leu Glu Lys Trp Leu Ala Lys Ile Ala 275 280

<210> 1695 <211> 232 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (113) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1695 Gly Val Asp Thr Ser Pro Phe Ala Lys Ser Leu Gly His Ser Arg Gly Glu Ala Asp Leu Phe Asp Ser Gly Asp Ile Phe Ser Thr Gly Thr Gly 20 25 Ser Gln Ser Val Glu Arg Thr Lys Pro Lys Ala Lys Ile Ala Glu Asn 40 Pro Ala Asn Pro Pro Val Gly Gly Lys Ala Lys Ser Pro Met Phe Pro Ala Leu Gly Glu Ala Ser Ser Asp Asp Leu Phe Gln Ser Ala Lys 70 75 Pro Lys Pro Ala Lys Lys Thr Asn Pro Phe Pro Leu Leu Glu Asp Glu 90 Asp Asp Leu Phe Thr Asp Gln Lys Val Lys Lys Asn Glu Thr Lys Ser 105 Xaa Ser Gln Gln Asp Val Ile Leu Thr Thr Gln Asp Ile Phe Glu Asp 115 120 Asp Ile Phe Ala Thr Glu Ala Ile Lys Pro Ser Gln Lys Thr Arg Glu 135 Lys Glu Lys Thr Leu Glu Ser Asn Leu Phe Asp Asp Asn Ile Asp Ile 150 155 Phe Ala Asp Leu Thr Val Lys Pro Lys Glu Lys Ser Lys Lys Val 165 170 Glu Ala Lys Ser Ile Phe Asp Asp Asp Met Asp Asp Ile Phe Ser Ser

Gly Ile Gln Ala Lys Thr Thr Lys Pro Lys Ser Arg Ser Ala Gln Ala

180

.

195 200 205

Ala Pro Glu Pro Arg Phe Glu His Lys Val Ser Asn Ile Phe Asp Asp 210 215 220

Pro Leu Asn Ala Phe Gly Gly Gln 225 230

<210> 1696

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1696

Arg Gly Gly Ser Pro Glu Val Ser Gly Asn Gly Ala Ala Leu Phe Glu
1 5 10 15

Met Phe Ser Tyr Leu Ile Leu Cys Pro Ser Arg Gly Ser Ser Leu Ile 20 25 30

Cys Leu Ala Trp Pro Cys Val Pro Pro Val Pro Cys Ser Thr Ala Tyr 35 40 45

Leu Val Pro Gln Val Leu Leu Ala Thr Pro Ala Val Thr Leu Asn Ser 50 55 60

Phe Asn Ser Ala Leu Asn Ala Pro Ala Ser Glu Ala Cys Pro Ile Ser 65 70 75 80

Phe Phe Leu Ala Ser Val Phe Phe Phe Ser Phe Phe Phe Pro Cys Phe 85 90 95

Cys Arg Arg Leu Arg Gly Glu Ser Phe Leu Trp Leu Pro Leu Leu Arg

Leu Glu Leu Glu Asn Leu Ile Phe Cys Ile 115 120

<210> 1697

<211> 272

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (256)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
 <221> SITE
 <222> (258)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
<221> SITE
 <222> (262)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (267)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1697
Pro Ala Pro Ala Ala His Val Ala Gly Asn Pro Gly Gly Asp Ala Ala
                                                          15
Pro Ala Ala Thr Gly Thr Ala Ala Ala Ser Leu Ala Thr Ala Ala
Gly Ser Glu Asp Ala Glu Lys Lys Val Leu Ala Thr Lys Val Leu Gly
                             40
Thr Val Lys Trp Phe Asn Val Arg Asn Gly Tyr Gly Phe Ile Asn Arg
     50
                         55
Asn Asp Thr Lys Glu Asp Val Phe Val His Gln Thr Ala Ile Lys Lys
 65
                     70
Asn Asn Pro Arg Lys Tyr Leu Arg Ser Val Gly Asp Gly Glu Thr Val
                                     90
Glu Phe Asp Val Val Glu Gly Glu Lys Gly Ala Glu Ala Asn Val
            100
                                105
Thr Gly Pro Asp Gly Val Pro Val Glu Gly Ser Arg Tyr Ala Ala Asp
                            120
Arg Arg Arg Tyr Arg Arg Gly Tyr Tyr Gly Arg Arg Arg Gly Pro Pro
                       135
                                           140
Arg Asn Ala Gly Glu Ile Gly Glu Met Lys Asp Gly Val Pro Glu Gly
145
                   150
                                       155
                                                            160
```

Ala Gln Leu Gln Gly Pro Val His Arg Asn Pro Thr Tyr Arg Pro Arg 165 170 175

Tyr Arg Ser Arg Gly Pro Pro Arg Pro Arg Pro Ala Pro Ala Val Gly
180 185 190

Glu Ala Glu Asp Lys Glu Asn Gln Gln Ala Thr Ser Gly Pro Asn Gln 195 200 205

Pro Ser Val Arg Arg Gly Tyr Arg Arg Pro Tyr Asn Tyr Arg Arg 210 215 220

Pro Arg Pro Pro Asn Ala Pro Ser Gln Asp Gly Lys Glu Ala Lys Ala 225 230 235 240

Gly Glu Ala Pro Thr Glu Asn Pro Ala Pro Pro Thr Ser Arg Ala Xaa 245 250 255

Leu Xaa Asn Thr Arg Xaa Xaa Arg His Leu Xaa His Arg Gln Val Thr 260 265 270

<210> 1698

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1698

Arg Glu Thr Ala Cys Cys Gly Arg Asp Ala Arg Gly Ala Ala Pro Ala 1 5 10 15

Ala Met Ala Val Thr Ala Leu Ala Ala Arg Thr Trp Leu Gly Val Trp
20 25 30

Gly Val Arg Thr Met Gln Ala Arg Gly Phe Gly Ser Asp Gln Ser Glu 35 40 45

Asn Val Asp Arg Gly Ala Gly Ser Ile Arg Glu Ala Gly Gly Ala Phe 50 55 60

Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg His Tyr Arg
65 70 75 80

Leu Cys Phe Glu Ile Ser Leu Gly

<210> 1699

<211> 223

<212> PRT

<213> Homo sapiens

<400> 1699

Cys Cys Ser Glu Gln Gln Arg Ile Ser Lys Asp Leu Ala Asn Ile Cys
1 5 10 15

Lys Thr Ala Ala Thr Ala Gly Ile Ile Gly Trp Val Tyr Gly Gly Ile
20 25 30

Pro Ala Phe Ile His Ala Lys Gln Gln Tyr Ile Glu Gln Ser Gln Ala 35 40 45

Glu Ile Tyr His Asn Arg Phe Asp Ala Val Gln Ser Ala His Arg Ala 50 55 60

Ala Thr Arg Gly Phe Ile Arg Tyr Gly Trp Arg Trp Gly Trp Arg Thr
65 70 75 80

Ala Val Phe Val Thr Ile Phe Asn Thr Val Asn Thr Ser Leu Asn Val 85 90 95

Tyr Arg Asn Lys Asp Ala Leu Ser His Phe Val Ile Ala Gly Ala Val 100 105 110

Thr Gly Ser Leu Phe Arg Ile Asn Val Gly Leu Arg Gly Leu Val Ala
115 120 125

Gly Gly Ile Ile Gly Ala Leu Leu Gly Thr'Pro Val Gly Gly Leu Leu 130 135 140

Met Ala Phe Gln Lys Tyr Ser Gly Glu Thr Val Gln Glu Arg Lys Gln 145 150 155 160

Lys Asp Arg Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly
165 170 175

Arg Leu Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu 180 185 190

Gln Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu 195 200 205

Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp 210 215 220

```
<210> 1700
 <211> 543
 <212> PRT
 <213> Homo sapiens
<220>
<221> SITE
<222> (264)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (269)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (279)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Arg Ala Arg Leu Thr Cys Pro Arg Arg Gly Pro Trp Glu Ala
                                    10
Gly Ser Arg Ala Thr Val Ser Leu Thr Arg Leu Ala Leu Gly Val Pro
Gly Pro Arg Glu His Pro Gly Gln Pro Glu Asp Ser Pro Glu Ala Glu
                            40
Ala Ser Thr Leu Asp Val Phe Thr Glu Arg Leu Pro Pro Ser Gly Arg
     50
                         55
Ile Thr Lys Thr Glu Ser Leu Val Ile Pro Ser Thr Arg Ser Glu Gly
                                         75
Lys Gln Ala Gly Arg Arg Gly Arg Ser Thr Ser Leu Lys Glu Arg Gln
                                    90
Ala Ala Arg Pro Gln Asn Glu Arg Ala Asn Ser Leu Asp Asn Glu Arg
           100
                               105
Cys Pro Asp Ala Arg Ser Gln Leu Gln Ile Pro Arg Lys Thr Val Tyr
                            120
                                                125
Asp Gln Leu Asn His Ile Leu Ile Ser Asp Asp Gln Leu Pro Glu Asn
   130
                       135
                                           140
Ile Ile Leu Val Asn Thr Ser Asp Trp Gln Gly Gln Phe Leu Ser Asp
145
                   150
                                      155
```

Val	Leu	Gln	Arg	His 165		Leu	Pro	Val	. Val		Thr	Cys	Ser	Pro 175	Ala
Asp	Val	Gln	Ala 180		Phe	Ser	Thr	Ile 185		Ser	Arg	Ile	Gln 190	Arg	Tyr
Cys	Asn	Cys 195		Ser	Gln	Pro	Pro 200		Pro	Val	Lys	Ile 205		Val	Ala
Gly	Ala 210	Gln	His	Tyr	Leu	Ser 215		Ile	Leu	Arg	Leu 220	Phe	Val	Glu	Gln
Leu 225		His	Lys	Thr	Pro 230	Asp	Trp	Leu	Gly	Tyr 235	Met	Arg	Phe	Leu	Val 240
Ile	Pro	Leu	Gly	Ser 245	His	Pro	Val	Ala	Arg 250	туr	Leu	Gly	Ser	Val 255	Asp
Tyr	Arg	Tyr	Asn 260	Asn	Phe	Phe	Xaa	Asp 265		Ala	Trp	Xaa	Asp 270	Leu	Phe
Asn	Lys	Leu 275	Glu	Ala	Gln	Xaa	Ala 280	Val	Gln	Asp	Thr	Pro 285	Asp	Ile	Val
Ser	Arg 290	Ile	Thr	Gln	Tyr	Ile 295	Ala	Gly	Ala	Asn	Cys 300	Ala	His	Gln	Leu
Pro 305	Ile	Ala	Glu	Ala	Met 310	Leu	Thr	Tyr	Lys	Gln 315	Lys	Ser	Pro	Asp	Glu 320
Glu	Ser	Ser	Gln	Lys 325	Phe	Ile	Pro	Phe	Val 330	Gly	Val	Val	Lys	Val 335	Gly
Ile	Val	Glu	Pro 340	Ser	Ser	Ala	Thr	Ser 345	Gly	Asp	Ser	Asp	Asp 350	Ala	Ala
Pro	Ser	Gly 355	Ser	Gly	Thr	Leu	Ser 360	Ser	Thr	Pro	Pro	Ser 365	Ala	Ser	Pro
Ala	Ala 370	Lys	Glu	Ala	Ser	Pro 375	Thr	Pro	Pro	Ser	Ser 380	Pro	Ser	Val	Ser
Gly 385	Gly	Leu	Ser	Ser	Pro 390	Ser	Gln	Gly	Val	Gly 395	Ala	Glu	Leu	Met	Gly 400
Leu ,	Gln	Val	Asp	Tyr 405	Trp	Thr	Ala	Ala	Gln 410	Pro	Ala	Asp	Arg	Lys 415	Arg
Asp	Ala	Glu	Lys 420	Lys	Asp	Leu	Pro	Val 425	Thr	Lys	Asn	Thr	Leu 430	Lys	Cys

Thr Phe Arg Ser Leu Gln Val Ser Arg Leu Pro Ser Ser Gly Glu Ala 435 440 445

Ala Ala Thr Pro Thr Met Ser Met Thr Val Val Thr Lys Glu Lys Asn 450 455 460

Lys Lys Val Met Phe Leu Pro Lys Lys Ala Lys Asp Lys Asp Val Glu
465 470 475 480

Ser Lys Ser Gln Cys Ile Glu Gly Ile Ser Arg Leu Ile Cys Thr Ala 485 490 495

Arg Gln Gln Asn Met Leu Arg Val Leu Ile Asp Gly Val Glu Cys 500 505 510

Ser Asp Val Lys Phe Phe Gln Leu Ala Ala Gln Trp Ser Ser His Val 515 520 525

Lys His Phe Pro Ile Cys Ile Phe Gly His Ser Lys Ala Thr Phe 530 535 540

<210> 1701

<211> 71

<212> PRT

<213> Homo sapiens

<400> 1701

Ile Pro Ser Tyr Thr Ile Lys Cys Ser Ile Gly Arg Gln Ser Val Ser 1 5 10 15

Phe Phe Phe Tyr Val Tyr Cys Leu Cys Gly Val Lys Tyr Lys Ala Leu 20 25 30

Gly Cys Ile Thr Tyr Ser Lys Ala Val Thr Leu Ser Leu Ile Cys Cys 35 40 45

Asp Pro Leu Lys Met Cys Trp Gly Leu Phe Cys Cys His Cys Leu Cys 50 55 60

Cys Trp Asn Leu Ala Leu Ser 65 70

<210> 1702

<211> 131

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1702 Glu His Val Phe Gly Phe Leu Phe Cys Val Ser Leu Leu Arg Ile Met Ala Ser Ser Ser Asp Gly Ile Ser Leu Ser Tyr Arg Pro Val Val Thr Gly Gln Asp Arg Met Met Asp Thr Glu Val Leu Ser Leu Leu Ser Ser Val Ala Leu Pro Ser Leu Leu Ala Ser Glu Ser Phe Asp Ser Ile 55 Tyr Pro Gly Ile Phe Cys Val Leu Met Phe Ser Ser Gly Leu Xaa Ser 70 Ala Val Leu Ile Gly Arg Ala Leu Ser Phe Gln Ala Ile Leu Lys Gly 85 Gly Gln Ser Lys Gly Gln Ser Leu Asn Pro Phe Cys Gly Leu Asn Asn 105 Leu Arg Ile Lys Ser Ser Val Leu Leu Ile Pro Val Leu Leu Cys Gln 120 Thr Leu Ser 130 <210> 1703 <211> 330 <212> PRT <213> Homo sapiens His Gly Asn Pro Asp Arg Pro Arg Gly Glu Glu Gly Asp Pro Val Gly Pro Ala Thr Leu Ser Ala Arg Leu Gly Ala Ser Ala Gly Ala

25

Met Thr Ser Leu Thr Gln Arg Ser Ser Gly Leu Val Gln Arg Arg Thr 35 40 45

Glu	Ala 50		: Arq	J Ası	n Ala	Ala 55		Lys	Glu	ı Arç	Ala 60		a Gly	7 Gly	gly
Ala 65		Ser	Ser	: Glu	Asp 70		Ala	Gln	Ser	75		J Asp	Glu	Glr	Asp 80
Asp	Asp	Asp	Lys	Gly 85		Ser	Lys	Glu	Thr 90		Leu	Thi	Leu	Met 95	Glu
Glu	Val	Leu	Leu 100		Gly	Leu	Lys	Asp 105	Arg	Glu	Gly	Туг	Thr 110		Phe
		115					120					125	•		Glu
	130					135					140				Arg
145					Arg 150					155					160
				165	Asp				170					175	
			180		Gln			185					190		
		195			Leu		200					205			
	210				Val	215					220				
225					Asp 230					235					240
				245	Ile				250					255	-
			260		His			265					270		
		275			Ser		280					285			
	290				Asp	295					300				
305	Leu	Asp	Pro	Glu	Val 310	Glu	Cys	Leu		Ala 315	Asn	Thr	Asn	Glu	Val 320

Leu Trp Ala Val Val Ala Ala Phe Thr Lys 325 330

<210> 1704

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1704

Val Phe Ile Ser Ile Val Ser Leu Arg His Gly Lys Gly Arg Met Leu

1 5 10 15

Lys Gln Val Met Phe Val Phe Ser Gly Met Gly Pro Arg Ser His Cys
20 25 30

Trp Gly Leu Pro Leu His Val Ala Pro Leu Cys Arg Pro Pro Gly Arg
35 40 45

Leu Phe Pro Pro Ser Pro Thr Glu Ala Pro Arg Gly Leu Asn Arg Asn 50 55 60

Leu Ala Asn Gln Arg His Phe Phe Cys Pro Ser Ile Phe His Thr Cys
65 70 75 80

Pro Thr Val Leu Phe Phe

<210> 1705

<211> 17

<212> PRT

<213> Homo sapiens

<400> 1705

Phe Gly Gly Glu Glu Met Ala Asp Ser Val Lys Thr Phe Leu Gln Asp 1 5 10 15

Leu

<210> 1706

<211> 471

<212> PRT

<213> Homo sapiens

<220>

```
<221> SITE
 <222> (37)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (41)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (48)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (191)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (373)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (446)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1706
Ser Thr Pro Ser Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr
Ser Ser Ala Val Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu
             20
                                  25
Asp Val Asp Arg Xaa Lys Lys Asp Xaa Glu Glu Glu Asp Gln Xaa
Pro Pro Cys Pro Arg Leu Ser Arg Glu Leu Leu Glu Val Val Glu Pro
Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser
 65
                     70
                                         75
Cys Leu Glu Gln Pro Asp Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr
                 85
Ala Leu Glu Glu Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile
            100
                                105
                                                    110
```

Glu	Lys	11	s Gl 5	y Ly:	s Gly	/ Ly:	s Ly:		g Ar	g Gl	y Ar	g Ar		r Ly:	s Lys
Glu	Arg 130	g Ar	g Ar	g Gly	y Arq	135		u Gly	y Gl	u Gli	u Ası 140		n As:	n Pro	Pro
Cys 145	Pro	Ar	g Lei	ı Sei	150		ı Let	ı Leı	ı Ası	9 Gli 155		Gl _y	/ Pro	o Gli	1 Val 160
Leu	Gln	Ası	Se ₁	165	Asp	Arg) Cys	5 Туг	Se:		r Pro	Ser	Gly	7 Cys	Leu i
Glu	Leu	Thi	180	Ser	Cys	Gln	Pro	185		g Ser	Ala	Phe	ту: 190		Leu
Glu	Gln	Glr 195	Arg	Val	Gly	Leu	Ala 200		Asp) Met	. Asp	Glu 205		: Glu	Lys
Tyr	Gln 210	Glu	Val	Glu	Glu	Asp 215		Asp	Pro	Ser	Cys 220		Arg	Leu	Ser
Arg 225	Glu	Leu	Leu	Asp	Glu 230	Lys	Glu	Pro	Glu	Val 235	Leu	Gln	Asp	Ser	Leu 240
Asp	Arg	Cys	Tyr	Ser 245	Thr	Pro	Ser	Gly	Tyr 250		Glu	Leu	Pro	Asp 255	Leu
Gly	Gln	Pro	Туг 260	Ser	Ser	Ala	Val	Tyr 265	Ser	Leu	Glu	Glu	Gln 270	Tyr	Leu
Gly	Leu	Ala 275	Leu	Asp	Val	Asp	Arg 280	Ile	Lys	Lys	Asp	Gln 285	Glu	Glu	Glu
Glu	Asp 290	Gln	Gly	Pro	Pro	Cys 295	Pro	Arg	Leu	Ser	Arg 300	Glu	Leu	Leu	Glu
Val '	Val	Glu	Pro	Glu	Val 310	Leu	Gln	Asp	Ser	Leu 315		Arg	Cys	Tyr	Ser 320
Thr 1	Pro	Ser	Ser	Cys 325	Leu	Glu	Gln	Pro	Asp 330	Ser	Cys	Gln	Pro	Tyr 335	Gly
Ser s	Ser	Phe	Tyr 340	Ala	Leu	Glu	Glu	Lys 345	His	Val	Gly	Phe	Ser 350	Leu	Asp
Val (Gly	Glu 355	Ile	Glu	Lys :		Gly 360	Lys	Gly	Lys		Arg 365	Arg	Gly	Arg
Arg S	er :	Lys	Lys	Xaa .		Arg . 375	Arg	Gly .	Arg		Glu 380	Gly	Glu	Glu	Asp

Gln Asn Pro Pro Cys Pro Arg Leu Asn Gly Val Leu Met Glu Val Glu 385 390 395 400

Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro
405 410 415

Ser Met Tyr Phe Glu Leu Pro Asp Ser Phe Gln His Tyr Arg Ser Val 420 425 430

Phe Tyr Ser Phe Glu Glu Gln His Ile Ser Phe Ala Leu Xaa Val Asp 435 440 445

As AArg Phe Phe Thr Leu Thr Val Thr Ser Leu His Leu Val Phe Gln 450 455 460

Met Gly Val Ile Phe Pro Gln . 465 470

<210> 1707

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1707

Arg Glu Arg Asn Leu Gly Ala Pro Gly Ser Gly Leu Lys Ala Ala Arg

1 5 10 15

Gln Ser Arg Ala Val Leu Ala Pro Ala Arg Gly Ala Ala Ala Pro Gly 20 25 30

Val Ala Met Thr Ser Glu Leu Asp Ile Phe Val Gly Asn Thr Thr Leu 35 40 45

Ile Asp Glu Asp Val Tyr Arg Leu Trp Leu Asp Gly Tyr Ser Val Thr 50 55 60

Asp Ala Val Ala Leu Arg Val Arg Ser Gly Ile Leu Glu Gln Thr Gly 65 70 75 80

Ala Thr Ala Ala Val Leu Gln Ser Asp Thr Met Asp His Tyr Arg Thr 85 90 95

Phe His Met Leu Glu Arg Leu Leu His Ala Pro Pro Lys Leu Leu His 100 105 110

Gln Leu Ile Phe Gln Ile Pro Pro Ser Arg Gln Ala Leu Leu Ile Glu 115 120 125

Arg Tyr Tyr Ala Phe Asp Glu Ala Phe Val Arg Glu Val Leu Gly Lys

130 135 140 Lys Leu Ser Lys Gly Thr Lys Lys Asp Leu Asp Asp Ile Ser Thr Lys 150 155 Thr Gly Ile Thr Leu Lys Ser Cys Arg Arg Gln Phe Asp Asn Phe Lys 165 170 Arg Val Phe Lys Val Val Glu Glu Met Arg Gly Ser Leu Val Asp Asn 180 Ile Gln Gln His Phe Leu Leu Ser Asp Arg Leu Ala Arg Asp Tyr Ala 200 Ala Ile Val Phe Phe Ala Asn Asn Arg Phe Glu Thr Gly Lys Lys 215 Leu Gln Tyr Leu Ser Phe Gly Asp Phe Ala Phe Cys Ala Glu Leu Met 225 230 235 Ile Gln Asn Trp Thr Leu Trp Ser Arg Arg 245 <210> 1708 <211> 337 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (127) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (283) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1708

Thr Gln Cys Gln Phe Asp Ile Met Leu Gly Gly Thr Asp Cys Arg Thr 20 25 30

Ile Tyr His Pro Ala Val Val Glu Ser Thr Ile Cys Ser Gly Ile Tyr

Phe Leu Thr Ser His Ile Asn Leu Lys Lys Thr Leu Cys Asp Val Ile Leu Met Val Gln Glu Arg Lys Ile Pro Ala His Arg Val Val Leu Ala 55 Ala Ala Ser His Phe Phe Asn Leu Met Phe Thr Thr Asn Met Leu Glu Ser Lys Ser Phe Glu Val Glu Leu Lys Asp Ala Glu Pro Asp Ile Ile 90 Glu Gln Leu Val Glu Phe Ala Tyr Thr Ala Arg Ile Ser Val Asn Xaa 100 105 Asn Asn Val Gln Ser Leu Leu Asp Ala Ala Asn Gln Tyr Gln Xaa Glu 120 Pro Val Lys Lys Met Cys Val Asp Phe Leu Lys Glu Gln Val Asp Ala 130 Ser Asn Cys Leu Gly Ile Ser Val Leu Ala Glu Cys Leu Asp Cys Pro 150 155 Glu Leu Lys Ala Thr Ala Asp Asp Phe Ile His Gln His Phe Thr Glu 165 170 Val Tyr Lys Thr Asp Glu Phe Leu Gln Leu Asp Val Lys Arg Val Thr 185 His Leu Leu Asn Gln Asp Thr Leu Thr Val Arg Ala Glu Asp Gln Val 200 Tyr Asp Ala Ala Val Arg Trp Leu Lys Tyr Asp Glu Pro Asn Arg Gln 215 Pro Phe Met Val Asp Ile Leu Ala Lys Val Arg Phe Pro Leu Ile Ser 230 235 Lys Asn Phe Leu Ser Lys Thr Val Gln Ala Glu Pro Leu Ile Gln Asp 245 Asn Pro Glu Cys Leu Lys Met Val Ile Ser Gly Met Arg Tyr His Leu 265 Leu Ser Pro Glu Asp Arg Glu Glu Leu Val Xaa Gly Thr Arg Pro Arg 275 280 Arg Lys Lys His Asp Tyr Arg Ile Ala Leu Phe Gly Gly Ser Gln Pro 290 295

Gln Ser Cys Arg Tyr Phe Asn Pro Lys Asp Tyr Ser Trp Thr Asp Ile 305 310 315

Arg Cys Pro Phe Glu Lys Arg Glu Met Gln His Ala Cys Phe Gly Thr 325 330 335

Met

<210> 1709

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1709

Val Ala Ser Gly His Pro Arg Pro Asp Ile Thr Trp Met Lys Asp Asp 1 5 10 15

Gln Ala Leu Thr Arg Pro Glu Ala Ala Glu Pro Arg Lys Lys Trp 20 25 30

Thr Leu Ser Leu Lys Asn Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr 35 40 45

Cys Arg Val Ser Asn Arg Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val 50 55 60

Asp Val Ile Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His 65 70 75 80

Pro Val Asn Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys
85 90 95

Lys Val Arg Thr Thr 100

<210> 1710

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1710

Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr Ser Gly Ser

1 5 10 15

Pro Gly Leu Gln Glu Phe Gly Thr Arg Asn Leu Arg Lys Met Val Ala

20 25 30

Met Ala Ala Gly Pro Ser Gly Cys Leu Val Pro Ala Phe Gly Leu Arg
35 40 45

Leu Leu Leu Ala Thr Val Leu Gln Ala Val Ser Ala Phe Gly Ala Glu 50 55 60

Phe Ser Ser Glu Ala Cys Arg Glu Leu Gly Phe Ser Ser Asn Leu Leu 65 70 75 80

Cys Ser Ser Cys Asp Leu Leu Gly Gln Phe Asn Leu Leu Gln Leu Asp
85 90 95

Pro Asp Cys Arg Gly Cys Cys Gln Glu Glu Ala Gln Phe Glu Thr Lys
100 105 110

Lys Leu Tyr Ala Gly Ala Ile Leu Glu Val Cys Gly 115 120

<210> 1711

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1711

Gly His Ala Ser Phe Arg Ala Phe Ser Phe Pro Pro Ser Ile Ser Asn
1 5 10 15

Leu Gly Met Phe Gly Ile Asp Glu Phe Thr Ala Val Ile Asp Pro Pro
20 25 30

Gln Ala Cys Ile Leu Ala Val Gly Arg Phe Arg Pro Val Leu Lys Leu 35 40 45

Thr Glu Asp Glu Glu Gly Asn Ala Lys Leu Gln Gln Arg Gln Leu Ile 50 60

Thr Val Thr Met Ser Ser Asp Ser Arg Val Val Asp Asp Glu Leu Ala 65 70 75 80

Thr Arg Phe Leu Lys Ser Phe Lys Ala Asn Leu Glu Asn Pro Ile Arg 85 90 95

Leu Ala

```
<210> 1712
<211> 100
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1712
Gly Ile Lys Gly Pro Trp Thr Glu Ser Cys Leu Gly Gly Pro Ser Gly
                                     10
Met Gly Xaa Gly His Thr Ser Leu Ala Ile Ser Gln Gln Asp Gln Ser
                                 25
Lys Leu Tyr His Leu Pro Pro Pro Thr Val Gly Pro His Ser Ile Ala
         35
                            40
Ser Pro Pro Glu Asp Arg Thr Val Lys Asp Ser Thr Pro Ser Ser Leu
Asp Ser Asp Pro Leu Met Ala Met Leu Leu Lys Leu Gln Glu Ala Ala
Asn Tyr Ile Glu Ser Pro Asp Arg Glu Thr Ile Leu Asp Pro Asn Leu
                                     90
Gln Ala Thr Leu
            100
<210> 1713
<211> 66
<212> PRT
<213> Homo sapiens
<400> 1713
Pro Ile Phe Ile Glu Tyr Phe Leu His Val Gln Leu His Pro Leu Cys
               5
                                   10
Lys Asp Tyr Met Asn Ile Ala His Ser Leu Leu Val Ser Gln Thr His
                                25
Leu Tyr Ile Phe Leu Ser Glu Ala His Cys Thr Cys Ile Glu Ala Arg
                            40
```

Ile Glu Ser Arg Lys Ile Lys Pro His Ser Pro Thr Ala Lys Cys Ala

```
Phe Pro
65
```

<210> 1714

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1714

Gly Thr Xaa Thr Phe Pro Gly Pro Pro Asn Asn Ser Ser Ile His Gly
1 5 10 15

Gly Ser Lys Arg Ser Glu Asn Ser Tyr Cys Arg Asp Leu Arg Gly Gln
20 25 30

Leu Arg Ala Ile Cys Cys Ser Ser Tyr Ser His Asp Arg His Thr Thr 35 40 45

Glu Glu Arg Gly Ser Arg Gly Arg Arg Val Trp Arg Ile Arg Arg Leu
50 55 60

His Thr Ser Gly Leu Pro Cys Cys Cys His Ser Gly Pro His Pro Arg
65 70 75 80

Arg Leu Pro Asp Ile Leu Arg Leu Val Thr Ser Thr Lys Thr Asp His 85 90 95

Thr Asn Thr Thr Glu Gly Thr Leu Asp Tyr Leu 100 105

<210> 1715

<211> 491

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1715

Ala Ala Arg Val Gly Arg His Gly Arg Arg Arg Arg Ser Ala Ala Met
1 5 10 15

Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala 20 25 30

Ala Cys Gly Trp Leu Leu Gly Ala Glu Xaa Xaa Xaa Pro Gly Ala Pro 35 40 45

Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly Ile 50 55 60

Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val Ser 65 70 75 80

Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly Arg
85 90 95

Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn Pro 100 105 110

Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn Met 115 120 125

His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala Gln 130 135 140

Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn Leu 145 150 155 160

Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp Gly 165 170 175

Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe Val

Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro Asp 195 200 205

Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn Asn 210 215 220

His 225		Leu	Lys	Asn	Met 230		Lys	Ile	Val	Asp 235		Asn	Thr	Lys	Leu 240
Ala	Pro	Glu	Thr	Lys 245		Val	Ile	His	Trp 250		Met	Asp	Ile	Pro 255	Phe
Val	Leu	Ser	Ala 260		Leu	His	Gly	Gly 265	Asp	Leu	Val	Ala	Asn 270		Pro
Tyr	Asp	Glu 275	Thr	Arg	Ser	Gly	Ser 280	Ala	His	Glu	Tyr	Ser 285	Ser	Ser	Pro
Asp	Asp 290	Ala	Ile	Phe	Gln	Ser 295	Leu	Ala	Arg	Ala	Туг 300	Ser	Ser	Phe	Asn
Pro 305	Ala	Met	Ser	Asp	Pro 310	Asn	Arg	Pro	Pro	Cys 315	Arg	Lys	Asn	Asp	Asp 320
Asp	Ser	Ser	Phe	Val 325	Asp	Gly	Thr	Thr	Asn 330	Gly	Gly	Ala	Trp	Tyr 335	Ser
Val	Pro	Gly	Gly 340	Met	Gln	Asp	Phe	Asn 345	Tyr	Leu	Ser	Ser	Asn 350	Cys	Phe
Glu	Ile	Thr 355	Val	Glu	Leu	Ser	Cys 360	Glu	Lys	Phe	Pro	Pro 365	Glu	Glu	Thr
Leu	Lys 370	Thr	Tyr	Trp	Glu	Asp 375	Asn	Lys	Asn	Ser	Leu 380	Ile	Ser	Tyr	Leu
Glu 385	Gln	Ile	His	Arg	Gly 390	Val	Lys	Gly	Phe	Val 395	Arg	Asp	Leu	Gln	Gly 400
Asn	Pro	Ile	Ala	Asn 405	Ala	Thr	Ile	Ser	Val 410	Glu	Gly	Ile	Asp	His 415	Asp
Val	Thr	Ser	Ala 420	Lys	Asp	Gly	Asp	Tyr 425	Trp	Arg	Leu	Leu	Ile 430	Pro	Gly
Asn	Tyr	Lys 435	Leu	Thr	Ala	Ser	Ala 440	Pro	Gly	Tyr	Leu	Ala 445	Ile	Thr	Lys
Lys	Val 450	Ala	Val	Pro	Tyr	Ser 455	Pro	Ala	Ala	Gly	Val 460	Asp	Phe	Glu	Leu
Glu 465	Ser	Phe	Ser	Glu	Arg 470	Lys	Glu	Glu	Glu	Lys 475	Glu	Glu	Leu	Met	Glu 480
Trp	Trp	Lys	Met	Met 485	Ser	Glu	Thr		Asn 490	Phe					

<210> 1716

<211> 179

<212> PRT

<213> Homo sapiens

<400> 1716

Ala Ala Glu Glu Thr Gly Gly Ala Gln Pro Glu Gly Arg Gly Val Gly
1 5 10 15

Pro Lys Glu Arg Glu Leu Gln His Ala Ala Leu Gly Gly Thr Ala Ile $20 \hspace{1cm} 25 \hspace{1cm} 30$

Gln Pro Cys Phe Phe Gln Asp Ile Ser Met Glu Ile Pro Gln Glu Phe 35 40 45

Gln Lys Thr Val Ser Thr Met Tyr Tyr Leu Trp Met Cys Ser Thr Leu 50 55 60

Ala Leu Leu Leu Asn Phe Leu Ala Cys Leu Ala Ser Phe Cys Val Glu 65 70 75 80

Thr Asn Asn Gly Ala Gly Phe Gly Leu Ser Ile Leu Trp Val Leu Leu 85 90 95

Phe Thr Pro Cys Ser Phe Val Cys Trp Tyr Arg Pro Met Tyr Lys Ala 100 105 110

Phe Arg Ser Asp Ser Ser Phe Asn Phe Phe Val Phe Phe Phe Ile Phe 115 120 125

Phe Val Gln Asp Val Leu Phe Val Leu Gln Ala Ile Gly Ile Pro Gly 130 135 140

Trp Gly Phe Ser Gly Trp Ile Ser Ala Leu Val Val Pro Lys Ala Thr 145 150 155 160

Gln Gln Tyr Pro Cys Ser Cys Cys Trp Ser Pro Cys Ser Ser Leu Ala 165 170 175

Leu Leu Cys

<210> 1717

<211> 499

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (485) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (486) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1717 Arg Pro Val Arg Asn Ser Arg Val Thr Thr Xaa Pro Pro Ala Gln Gln 10 15 Thr Arg Arg Asp Gln Ser Val Pro Val Gly Ser Met Ala Thr Lys Cys 20 25 Gly Asn Cys Gly Pro Gly Tyr Ser Thr Pro Leu Glu Ala Met Lys Gly 40 Pro Arg Glu Glu Ile Val Tyr Leu Pro Cys Ile Tyr Arg Asn Thr Gly 50 55 Thr Glu Ala Pro Asp Tyr Leu Ala Thr Val Asp Val Asp Pro Lys Ser Pro Gln Tyr Cys Gln Val Ile His Arg Leu Pro Met Pro Asn Leu Lys 85 90 Asp Glu Leu His His Ser Gly Trp Asn Thr Cys Ser Ser Cys Phe Gly 100 Asp Ser Thr Lys Ser Arg Thr Lys Leu Val Leu Pro Ser Leu Ile Ser Ser Arg Ile Tyr Val Val Asp Val Gly Ser Glu Pro Arg Ala Pro Lys 135 Leu His Lys Val Ile Glu Pro Lys Asp Ile His Ala Lys Cys Glu Leu 145 150 Ala Phe Leu His Thr Ser His Cys Leu Ala Ser Gly Glu Val Met Ile 165 170 Ser Ser Leu Gly Asp Val Lys Gly Asn Gly Lys Gly Gly Phe Val Leu

180 185 190

Leu Asp Gly Glu Thr Phe Glu Val Lys Gly Thr Trp Glu Arg Pro Gly
195 200 205

Gly Ala Ala Pro Leu Gly Tyr Asp Phe Trp Tyr Gln Pro Arg His Asn 210 215 220

Val Met Ile Ser Thr Glu Trp Ala Ala Pro Asn Val Leu Arg Asp Gly 225 230 235 240

Phe Asn Pro Ala Asp Val Glu Ala Gly Leu Tyr Gly Ser His Leu Tyr 245 250 255

Val Trp Asp Trp Gln Arg His Glu Ile Val Gln Thr Leu Ser Leu Lys 260 265 270

Asp Gly Leu Ile Pro Leu Glu Ile Arg Phe Leu His Asn Pro Asp Ala 275 280 285

Ala Gln Gly Phe Val Gly Cys Ala Leu Ser Ser Thr Ile Gln Arg Phe 290 295 300

Tyr Lys Asn Glu Gly Gly Thr Trp Ser Val Glu Lys Val Ile Gln Val 305 310 315 320

Pro Pro Lys Lys Val Lys Gly Trp Leu Leu Pro Glu Met Pro Gly Leu 325 330 335

Ile Thr Asp Ile Leu Leu Ser Leu Asp Asp Arg Phe Leu Tyr Phe Ser 340 345 350

Asn Trp Leu His Gly Asp Leu Arg Gln Tyr Asp Ile Ser Asp Pro Gln 355 360 365

Arg Pro Arg Leu Thr Gly Gln Leu Phe Leu Gly Gly Ser Ile Val Lys 370 380

Gly Gly Pro Val Gln Val Leu Glu Asp Glu Glu Leu Lys Ser Gln Pro 385 390 395 400

Glu Pro Leu Val Val Lys Gly Lys Arg Val Ala Gly Gly Pro Gln Met 405 410 415

Ile Gln Leu Ser Leu Asp Gly Lys Arg Leu Tyr Ile Thr Thr Ser Leu
420 425 430

Tyr Ser Ala Trp Asp Lys Gln Phe Tyr Pro Asp Leu Ile Arg Glu Gly
435 440 445

Ser Val Met Leu Gln Val Asp Val Asp Thr Val Lys Gly Gly Leu Lys

450 455 460

Leu Asn Pro Asn Phe Leu Val Asp Phe Gly Lys Glu Pro Leu Gly Pro 465 470 475 480

Ala Leu Ala His Xaa Xaa Arg Tyr Pro Gly Gly Asp Cys Ser Ser Asp 485 490 495

Ile Trp Ile

<210> 1718

<211> 213

<212> PRT

<213> Homo sapiens

<400> 1718

Phe Ile Met Asp Asn Leu Ser Ser Glu Glu Ile Gln Gln Arg Ala His 1 5 10 15

Gln Ile Thr Asp Glu Ser Leu Glu Ser Thr Arg Arg Ile Leu Gly Leu 20 25 30

Ala Ile Glu Ser Gln Asp Ala Gly Ile Lys Thr Ile Thr Met Leu Asp 35 40 45

Glu Gln Lys Glu Gln Leu Asn Arg Ile Glu Glu Gly Leu Asp Gln Ile 50 55 60

Asn Lys Asp Met Arg Glu Thr Glu Lys Thr Leu Thr Glu Leu Asn Lys 65 70 75 80

Cys Cys Gly Leu Cys Val Cys Pro Cys Asn Arg Thr Lys Asn Phe Glu 85 90 95

Ser Gly Lys Ala Tyr Lys Thr Thr Trp Gly Asp Gly Glu Asn Ser 100 105 110

Pro Cys Asn Val Val Ser Lys Gln Pro Gly Pro Val Thr Asn Gly Gln 115 120 125

Leu Gln Gln Pro Thr Thr Gly Ala Ala Ser Gly Gly Tyr Ile Lys Arg 130 135 140

Ile Thr Asn Asp Ala Arg Glu Asp Glu Met Glu Glu Asn Leu Thr Gln 145 150 155 160

Val Gly Ser Ile Leu Gly Asn Leu Lys Asp Met Ala Leu Asn Ile Gly 165 170 175 Asn Glu Ile Asp Ala Gln Asn Pro Gln Ile Lys Arg Ile Thr Asp Lys 180 185 190

Ala Asp Thr Asn Arg Asp Arg Ile Asp Ile Ala Asn Ala Arg Ala Lys
195 200 205

Lys Leu Ile Asp Ser 210

<210> 1719

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1719

Gly Met Glu Gly Thr Glu Met Gly Ala Arg Pro Gly Gly His Pro Gln
1 5 10 15

Lys Trp Ser Phe Leu Trp Ser Leu Ala Leu Trp Leu Pro Leu Ala Leu 20 25 30

Ser Val Ser Leu Phe Leu Gly Leu Ser Leu Ser Pro Pro Gln Pro Gly 35 40 45

Leu Ser Leu Trp Cys Thr Leu Ser Tyr Cys Cys Glu Gln Trp Lys Phe 50 55 60

Lys Gly Thr Pro Ser Pro Ala Leu Leu Asn Leu Gly Thr Gln Pro Lys 65 70 75 80

Lys Asp Lys Lys Leu Glu Asp Ser Ile Ala Thr Gln Leu Arg Glu Leu 85 90 95

Pro Glu Lys Asn Ser Asn 100

<210> 1720

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1720

Ala Gln Trp Leu Thr Pro Val Ile Leu Ala Phe Trp Lys Ala Glu Ala 1 5 10 15

Gly Gly Ser Leu

20

Arg Pro Ala Asn Phe Leu Tyr Phe

55

```
<210> 1721
<211> 50
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1721
Ile Arg His Glu Val Leu Ile Val Pro Leu Leu Val Gly Leu Arg Gln
                  5
                                      10
                                                          15
Glu Asp His Leu Ser Pro Gly Gly Arg Gly Tyr Ser Glu Pro Arg Val
             20
His Tyr Cys Thr Pro Ala Arg Xaa Arg Glu Arg Asp Pro Val Ser Ile
Asn Lys
     50
<210> 1722
<211> 56
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1722
Glu Xaa Gly Thr Glu Ser His Tyr Val Thr Gln Ala Gly Val Gln Trp
His Asp Leu Ser Ser Leu Gln Pro Ser Pro Pro Gly Phe Lys Arg Phe
                                 25
Ser Cys Leu Arg Leu Leu Ser Ser Trp Asp Tyr Arg His Thr Pro Pro
                            40
```

```
<210> 1723
 <211> 111
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1723
Gly Ser Thr His Ala Ser Ala Met Xaa Xaa Xaa Thr Ser Gly Val Gly
 1
                                     10
Asp Glu Trp Trp Pro Lys Gln Gly Asp Ser Lys Gly Arg Ser Gly Gly
             20
Arg Pro Trp Arg Thr Ala Ala Arg Ser Gly Leu Thr Gly Ala Ser Ser
Arg Xaa Arg Trp Thr Thr Ala Pro Arg Trp Ile Ser Ala Tyr Pro Ser
                         55
```

Val Arg Xaa Ala Lys Glu Gly Arg Leu Gln Glu Val Ile Glu Thr Leu 65 70 75 80

Leu Ser Leu Glu Lys Gln Thr Arg Thr Ala Ser Asp Met Val Ser Thr 85 90 95

Ser Arg Ile Leu Val Ala Ser Ser Gly Arg Cys Ala Asn Xaa Gly 100 105 110

<210> 1724

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1724

Gly Arg Gly Arg Cys Glu Xaa Gly Lys Met Ala Ala Ala Ala Val Val 1 5 10 15

Glu Phe Gln Arg Ala Gln Ser Leu Leu Ser Thr Asp Arg Glu Ala Ser
20 25 30

Ile Asp Ile Leu His Ser Ile Val Lys Arg Asp Ile Gln Glu Asn Asp 35 40 45

Glu Glu Ala Val Gln Val Lys Glu Gln Ser Ile Leu Glu Leu Gly Ser 50 55 60

Leu Leu Ala Lys Thr Xaa Gln Ala Ala Glu Leu 65 70 75

<210> 1725

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

```
<222> (59)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Pro Gly Ser Arg His His Arg Ala Arg Asp Arg Leu Ile His Phe Gly
                                       10
 Ala Val Ser Thr Asp Val Leu Gly Cys Ser Ala His Cys Ser Leu Thr
 Gln Ser Pro Lys Met Asn Ile Gln Glu Gln Gly Phe Pro Leu Asp Leu
                              40
 Gly Ala Ser Phe Thr Glu Asp Ala Pro Pro Xaa Pro Ser Ala Trp
                         55
 <210> 1726
 <211> 170
 <212> PRT
 <213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (106)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (113)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (115)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1726

Ala Glu Pro Asp Gly Ser His Pro Val Val Xaa Ala Pro Tyr Asn Gly
1 5 10 15

Gly Pro Ala Gly Thr Cys Pro Lys Ile Lys Gln Glu Ala Val Ser Ser 20 25 30

.Cys Thr His Leu Gly Ala Gly Pro Pro Leu Gln Gln Trp Pro Pro Ala 35 40 45

Gly Cys His Thr Asp Phe Pro Leu Gly Thr Ala Xaa Pro Gln Gln Asp 50 55 60

Leu Pro Arg Thr Leu Gly Leu Glu Gly Ser Ala Glu Gln Gln Gly Thr
65 70 75 80

Val His Pro Ala Leu Pro Val Ser Xaa Arg Val Ser Ile Pro Thr Arg 85 90 95

Gly Pro Asn Leu Pro Xaa Xaa Phe Leu Xaa Pro Ile Gln Met Gln Pro 100 105 110

Xaa Val Xaa Xaa Arg Xaa Ile Asn Gln Gly Val Tyr Ala Asn Arg Xaa 115 120 125

Leu Asp Ala Lys Gly Gly Pro Ser Gln Arg Gly Xaa Arg Arg Leu Trp
130 135 140

Lys Xaa Ser Lys Lys Gly Phe Ser Xaa Phe 165 170

<210> 1727

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

PCT/US00/05988

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1727

Leu Arg Ala Arg Gly Ala Ala Trp Ala Gly Gly Leu Leu His Arg Ala

Ala Pro Cys Ser Leu Leu Pro Arg Leu Arg Thr Trp Thr Ser Ser Ser 25

Asn Arg Ser Arg Glu Asp Ser Trp Leu Lys Ser Leu Phe Val Arg Lys 40 45

Val Asp Pro Arg Lys Asp Ala His Ser Asn Leu Leu Ser Lys Lys Glu 55

Thr Ser Asn Leu Tyr Lys Leu Gln Phe His Asn Val Lys Pro Glu Cys 65 70

Leu Glu Xaa Tyr Asn Lys Ile Cys Gln Glu Val Leu Pro Lys Ile His 85 90

Xaa Xaa

<210> 1728

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1728

Gly Ser Leu Phe Pro Arg Val Leu Pro Ser Pro Leu Gly Pro Pro Gly 10

Gly Lys His Gly Val Cys Pro Gly Ala Val Arg Glu Gln Cys Pro Thr 20

Ala Leu Ser Ser Arg Phe Val Lys Phe Ser Met Pro Ser Val Pro Asp 35 40

Phe Glu Thr Leu Phe Ser Gln Val Gln Leu Phe Ile Ser Thr Cys Asn

50 55 60

Gly Glu His Ile Arg Tyr Ala Thr Asp Thr Phe Ala Gly Leu Cys His 65 70 75 80

Gln Leu Thr Asn Ala Leu Val Glu Arg Lys Gln Pro Leu Arg Gly Ile 85 90 95

Gly Ile Leu Lys Gln Ala Ile Asp Lys Met Gln Met Asn Thr Asn Gln 100 105 110

Leu Thr Ser Ile His Xaa Asp Leu Cys Gln Leu Val Cys
115 120 125

<210> 1729

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1729

Ile Leu Thr Met Arg Glu Ile Val His Ile Gln Ala Gly Gln Cys Gly
1 5 10 15

Asn Gln Ile Gly Ala Lys Phe Trp Glu Val Ile Ser Asp Glu His Gly
20 25 30

His Arg Pro His Arg Ala Pro Thr Thr Gly Asp Ser Asp Leu Pro Ala 35 40 45

Gly Thr Ala Xaa Ser Val Tyr 50 55

<210> 1730

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1730

Arg Ile Ala Ala Ser Glu Thr Arg Val Ala Pro Ser Val Leu Arg Leu 1 5 10 15

Ala Met Thr Ser Tyr Ser Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe

20 25 30

PCT/US00/05988

Gly Gly Leu Gly Gly Gly Ser Val Arg Phe Gly Pro Gly Val Ala Phe
35 40 45

Arg Ala Pro Ser Ile His Gly Gly Ser Gly Gly Arg Gly Val Ser Val 50 55 60

Ser Ser Ala Arg Phe Val Ser Ser Ser Ser Gly Gly Tyr Gly Gly 65 70 75 80

Gly Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly Leu Leu Ala Gly Asn 85 90 95

Glu Lys Leu Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu 100 105 110

Asp Lys Val Arg Ala Leu Glu Ala Ala Asn Gly Glu Leu Glu Val Lys
115 120 125

<210> 1731

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (143)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1731

Ser Thr His Ala Ser Ala His Ala Ser Glu Trp Ser Glu Glu Gln Leu 1 5 10 15

Ile Ala Ala Lys Phe Cys Phe Ala Gly Leu Leu Ile Gly Gln Thr Glu 20 25 30 Val Asp Ile Met Ser Xaa Ala Thr Gln Ala Ile Phe Glu Ile Leu Glu 35 40 45

Lys Ser Trp Leu Pro Gln Asn Cys Thr Leu Val Asp Met Lys Ile Glu 50 55 60

Phe Gly Val Asp Val Thr Thr Lys Glu Ile Val Leu Ala Asp Val Ile 65 70 75 80

Asp Asn Asp Ser Trp Arg Leu Trp Pro Ser Gly Asp Arg Ser Gln Gln 85 90 95

Lys Asp Lys Gln Ser Tyr Arg Asp Leu Lys Glu Val Thr Pro Glu Gly
100 105 110

Leu Gln Met Val Lys Arg Asn Phe Glu Trp Val Ala Glu Arg Val Glu 115 120 125

Leu Leu Lys Ser Xaa Ser Gln Cys Arg Val Val Val Leu Xaa Gly 130 135 140

Ser Thr Ser Asp Leu Gly His Cys Glu Lys Ile Gln 145 150 155

<210> 1732

<211> 101

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1732
Val Asp Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly
                                     10
Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Xaa Glu Ile Thr
Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu
                             40
Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser
                         55
Thr Phe Gln Xaa Xaa Trp Ile Thr Ser Arg Ser Thr Thr Xaa Arg Xaa
                     70
                                         75
Pro Pro Ser Ser Thr Ala Asn Ala Ser Asn Xaa Leu Xaa Xaa Ala Tyr
                85
                                     90
His Cys Cys Met Gly
            100
```

<210> 1733 <211> 101 <212> PRT <213> Homo sapiens

<220>

<221> SITE

```
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1733
Ala Arg Arg Arg Gln Lys Gly Pro Ala Ala Pro Glu Ser Lys Pro Val
                                     10
Pro Ala Gln Ser Arg Pro Ala Ala Val Cys Leu Leu Phe Gln His Asp
             20
Arg Cys Arg Cys Val Leu Arg Gln Gly Leu Pro Gly Arg Trp Ser Gly
Arg Ser His Leu Lys Thr Ala Val Xaa Pro Ser Ser Gly Ser Ser Cys
                         55
Cys Cys Ser Cys Asn Ala Ser Lys Gln Ile Thr Ala Asp Lys Gln Cys
                     70
                                         75
Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu Gln Asp Ser
                                     90
Val Leu Leu Ala Xaa
            100
<210> 1734
<211> 152
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (133)
```

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (145) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (148) <223> Xaa equals any of the naturally occurring L-amino acids Ala Arg Val His Leu Glu Leu Gln Glu Ala Arg Val Met Leu Val Pro 10 Leu Val Asn Val Asp Leu Leu Asp Trp Gln Gly Pro Gln Asp Leu Glu Val Glu Leu Val Pro Leu Val Pro Lys Glu Glu Arg Val Leu Leu Val 35 40 Leu Leu Gly His Leu Val Leu Leu Val Leu Val Cys Lys Glu Cys Leu Glu Lys Glu Glu Val Leu Glu Val Leu Val Gln Arg Val Thr Arg 75 Val Asn Gln Ala Val Gln Val Leu Met Val Ser Gln Gly Lys Met Ala 85 90 Gln Gly Val Leu Xaa Val Leu Leu Val Leu Leu Ala Gln Leu Ala Ser 100 105 Leu Glu Ile Lys Gly Glu Gly Gly Ala Pro Gly Phe Pro Xaa Ile Ser 120 Trp Thr Cys Gly Xaa Pro Gly Glu Arg Gly Glu Met Ala Xaa Gln Asp 130 135 140 Xaa Trp Phe Xaa Trp Cys Ser Trp

150

```
<211> 26
```

<212> PRT

<213> Homo sapiens

<400> 1735

Val Arg Ala Arg Val Pro Ser Pro Ala Ala Ala Met Gly Cys Thr Leu

1 5 10 15

Ser Ala Glu Asp Lys Ala Ala Val Glu Arg 20 25

<210> 1736

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1736

His Glu Val Ser Ala Ala Ser Leu Val Pro Ala Val Pro Gln Pro Glu
1 5 10 15

Ala Asp Asn Leu Thr Leu Arg Tyr Arg Ser Leu Val Tyr Gln Leu Asn 20 25 30

Phe Asp Gln Thr Leu Arg Asn Val Asp Lys Ala Gly Thr Trp Ala Pro 35 40 45

Arg Glu Leu Val Leu Val Gln Val His Asn Arg Pro Glu Tyr Leu 50 60

Arg Leu Leu Asp Ser Leu Arg Lys Ala Gln Gly Ile Asp Asn Val 65 70 75 80

Leu Val Ile Phe Ser His Asp Ser Gly Arg Pro Arg Ser Ile Ser 85 90 95

<210> 1737

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1737

Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met

```
1
                                      10
                                                           15
Arg Arg His Ser Ser Ser Ile Glu Ser Pro Lys Phe Asn Ser Leu Ala
              20
                                  25
Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
                              40
Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
     50
                          55
                                              60
Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Xaa
                     70
<210> 1738
<211> 55
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
                                                      .. ....
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
Leu Ile Xaa His Ile Gly Xaa Gly Xaa Cys Ser Thr Val Xaa Ile Pro
Gly Ser Arg Asp Pro Ser Leu Arg Thr Ala His Ala Arg His Ser Ser
             20
Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln Arg
                             40
Arg Asp Trp Glu Asn Xaa Xaa
     50
<210> 1739
<211> 37
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1739
Ser Arg Gly Ser Lys Leu Thr Xaa Ala Cys Met Arg Arg His Ser Ser
Ser Ile Val Ser Ala Lys Phe Asn Ser Leu Ala Val Val Leu Gln Arg
                                25
Arg Xaa Trp Glu Xaa
         35
<210> 1740
```

<211> 110 <212> PRT

<213> Homo sapiens

<400> 1740 Leu Thr Glu Thr Arg Phe Lys Thr Gly Thr Thr Leu Lys Tyr Thr Cys 10 Leu Pro Gly Tyr Val Arg Ser His Ser Thr Gln Thr Leu Thr Cys Asn Ser Asp Gly Glu Trp Val Tyr Asn Thr Phe Cys Ile Tyr Lys Arg Cys 40 45 Arg His Pro Gly Glu Leu Arg Asn Gly Gln Val Glu Ile Lys Thr Asp Leu Ser Phe Gly Ser Gln Ile Glu Phe Ser Cys Ser Glu Gly Phe Phe Leu Ile Gly Ser Thr Thr Ser Arg Cys Glu Val Gln Asp Arg Gly Val 85 Gly Trp Ser His Pro Leu Pro Gln Cys Glu Ile Val Gln Val 100 105 <210> 1741 <211> 49 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1741

```
Gln Val His Leu Asp Gln Val Glu Val Ala Ser Xaa Leu Thr Leu Cys
 Lys Glu Gly Cys Xaa Ala Ile Val Asp Thr Gly Thr Ser Leu Met Val
              20
                                  25
Gly Pro Val Asp Xaa Val Arg Xaa Cys Arg Arg Pro Ser Gly Pro Cys
                              40
Arg
<210> 1742
<211> 90
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1742
Gly Pro Ser Thr Arg Xaa Xaa Met Ile Glu Tyr Asp Pro Glu Arg Arg
                  5
Leu Gly Ile Phe Trp Val Ser Cys Glu Ala Gly Thr Tyr Ile Arg Thr
Leu Cys Val His Leu Gly Leu Leu Gly Val Gly Gln Met Gln
Glu Leu Arg Arg Val Arg Ser Gly Val Met Ser Xaa Lys Asp His Xaa
                         55
Val Thr Met His Asp Val Leu Xaa Ala Gln Trp Leu Tyr Xaa Asn His
Lys Asp Glu Ser Xaa Leu Arg Gly Val Val
<210> 1743
<211> 116
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (36)

<220> <221> SITE <222> (74)

```
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1743
Ala Gly Ser Val Arg Arg Pro Cys Arg Arg Pro Trp Gly Xaa Arg Ala
Gly Glu Arg Met Xaa Gly Ala Gly Glu Glu Asp Pro Ala Ala Ala Phe
             20
                                 25
Leu Ala Gln Xaa Arg Ser Glu Ile Ala Gly Ile Glu Asn Asp Glu Ala
         35
                             40
Phe Ala Ile Leu Glu Arg Arg Pro Arg Ala Pro Thr Ala Arg Lys
Val Arg Arg Gly Val Pro Met Leu Leu Xaa Gly Xaa Met Xaa Trp Trp
65
                    70
                                         75
Ile Xaa Thr Xaa Lys Leu Met Val Pro Thr Xaa Ile Met Gln Tyr Phe
                 85
                                     90
                                                         95
```

Lys Met Asp Arg Leu His Gln Asn Leu Lys Tyr Pro Lys Trp Arg Xaa

```
100
                                105
Lys Met Glu Xaa
         115
<210> 1744
<211> 125
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1744
Arg Val Thr Thr Gly Thr Xaa Xaa Val Leu Val Ala Val Asp Lys Gly
```

1 5 10 15

Val Phe Val Leu Asn Lys Xaa Asn Lys Leu Thr Gln Ser Lys Ile Trp
20 25 30

Asp Val Val Glu Lys Ala Asp Ile Gly Cys Thr Pro Gly Ser Gly Lys
35 40 45

Asp Tyr Ala Gly Val Phe Ser Asp Ala Gly Leu Thr Xaa Thr Ser Ser 50 55 60

Ser Gly Gln Gln Thr Ala Gln Xaa Ala Glu Leu Gln Cys Pro Gln Pro 65 70 75 80

Ala Ala Arg Arg Arg Xaa Ser Val Gln Leu Thr Glu Lys Arg Met Asp 85 90 95

Lys Val Gly Lys Tyr Pro Lys Glu Leu Xaa Lys Cys Cys Glu Asp Gly
100 105 110

Ile Arg Glu Asn Pro Met Lys Phe Ser Cys Gln Gly Gly
115 120 125

<210> 1745

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1745

Gly Ala Ala Val Ser Val Lys Met Ile Glu Val Leu Thr Thr Asp 1 5 10 15

Ser Gln Lys Leu Leu His Gln Leu Asn Ala Leu Leu Glu Gln Glu Ser 20 25 30

Arg Cys Gln Pro Lys Val Cys Gly Leu Arg Leu Ile Glu Ser Ala His
35 40 45

Asp Asn Gly Leu Arg Met Thr Ala Arg Leu Arg Asp Phe Glu Val Lys 50 55 60

Asp Leu Leu Ser Leu Thr Gln Phe Leu Ala 65 70

<210> 1746

<211> 38

<212> PRT

```
<213> Homo sapiens
<400> 1746
Phe Phe Gly His Pro Glu Val Tyr Ile Leu Ile Leu Pro Gly Phe Gly
Ile Ile Ser His Ile Val Thr Tyr Tyr Ser Gly Lys Lys Glu Pro Phe
             20
                                 25
Gly Tyr Ile Gly Met Val
         35
<210> 1747
<211> 35
<212> PRT
<213> Homo sapiens
<400> 1747
Leu Val Pro Asn Ser Ala Arg Glu Thr Phe Leu Thr Ile Cys Phe Ile
                  5
Arg Gln Leu Ile Phe His Phe Thr Ser Lys His His Phe Gly Phe Glu
Ala Ala Ala
<210> 1748
<211> 183
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
 <222> (149)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Arg Val Glu Asn Arg Ala Gln Gln His Trp Gly Ser Gly Val Gly
                                     10
Val Lys Lys Leu Cys Glu Leu Gln Pro Glu Glu Lys Cys Cys Val Val
                                 25
Gly Thr Leu Phe Lys Ala Met Pro Leu Gln Pro Ser Ile Leu Arg Glu
         35
                             40
Val Ser Glu Glu His Asn Leu Leu Pro Gln Pro Pro Arg Ser Lys Tyr
     50
                         55
Ile His Pro Asp Asp Glu Leu Val Leu Glu Asp Glu Leu Gln Arg Ile
                     70
Lys Leu Lys Gly Thr Ile Asp Val Ser Lys Leu Val Thr Gly Thr Val
                 85
                                     90
Leu Ala Val Phe Gly Ser Val Arg Asp Asp Gly Lys Phe Leu Val Glu
            100
```

Asp Tyr Cys Phe Val Asp Leu Ala Pro Gln Lys Pro Xaa Pro Pro Leu 115 120 125

Thr Gln Leu Gly Xaa Val Xaa Gly Val Arg Pro Gly Pro Gly Trp Arg
130 135 140

Trp Arg Arg Glu Xaa Val Gly His Pro Leu Leu Val Asp Xaa Val Thr 145 150 155 160

Gly Gln Phe Gly Asp Glu Gly Xaa His Ala Xaa Xaa Pro Ser Phe Pro 165 170 175

Val Ile Leu Val Xaa Thr Ser 180

<210> 1749

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1749

His Glu Ala Glu Ala Ala Pro Val Gly Arg Ala Arg Gly Cys Cys Lys
1 5 10 15

Ala Glu Val Ala Ala Glu Ala Glu Thr Met Phe Arg Ala Ala Pro 20 25 30

Gly Gln Leu Arg Arg Ala Ala Ser Leu Leu Arg Phe Gln Ser Thr Leu 35 40 45

Val Ile Ala Glu His Ala Asn Asp Ser Leu Ala Pro Ile Thr Leu Asn 50 55 60

Thr Ile Thr Ala Ala Thr Arg Leu Gly Glu Val Ser Cys Leu Val
65 70 75 80

Ala Gly Thr Lys Cys Asp Lys Val Ala Gln Asp Leu Cys Lys Val Ala 85 90 95

Gly Ile Ala Lys Ser Ser Gly Gly Ser Ala 100 105

<210> 1750

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1750

Arg Ser Cys Gly Val Thr Ala Gln Lys Tyr Arg Cys Glu Leu Leu Tyr 1 5 10 15

Glu Gly Pro Pro Asp Asp Glu Ala Ala Met Gly Ile Lys Ser Cys Asp 20 25 30

Pro Lys Gly Pro Leu Met Met Tyr Ile Ser Lys Met Val Pro Thr Ser 35 40 45

Asp Lys Gly Arg Phe Tyr Ala Phe Gly Arg Val Phe Ser Gly Leu Val 50 55 60

Ser Thr Gly Leu Lys Val Arg Ile Met Gly Pro Asn Tyr Thr Pro Gly 65 70 75 80

Lys Lys Glu Asp Leu Tyr Leu Lys Pro Ile Gln Arg Thr Ile Leu Met 85 90 95

Met Gly Arg

<210> 1751

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1751

Ala Ala Gln Pro Arg Leu Met Glu Pro Ile Tyr Leu Val Glu Ile Gln
1 5 10 15

Cys Pro Glu Gln Val Val Gly Gly Ile Tyr Gly Val Leu Asn Arg Lys 20 25 30

Arg Gly His Val Phe Glu Glu Ser Gln Val Ala Gly Thr Pro Met Phe 35 40 45

Val Val Lys Ala Tyr Leu Pro Val Asn Glu Ser Phe Gly Phe Thr Ala 50 55 60

Asp Leu Arg Ser Asn Thr Gly Gly Gln Ala Phe Pro Gln Cys Val Phe 65 70 75 80

Asp His Trp Gln Ile Leu Pro Gly Asp Pro Phe Asp Asn Ser Ser Arg 85 90 95

Pro Ser Gln Val Val Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu 100 105 110 Gly Ile Pro Ala Leu Asp Asn Phe Leu Asp Lys Leu 115 120

<210> 1752

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1752

Arg Glu Gln Lys Leu Glu Leu His Arg Gly Ala Ala Ala Leu Glu Leu l 5 10 15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Gln Phe Ala Arg 20 25 30

Ser Leu Ser Ala Ala Pro Gln Leu Ser Asp Thr Ala Asp Thr Met Gly
35 40 45

Phe Gly Asp Leu Lys Ser Pro Ala Gly Leu Gln Val Leu Asn Asp Tyr 50 55 60

Leu Ala Asp Lys Ser Tyr Ile Glu Gly Tyr Val Pro Ser Gln Ala Asp
65 70 75 80

Val Ala Val Phe Glu Ala Val Ser Ser Pro Pro Pro Ala Asp Leu Cys 85 90 95

His Ala Leu Arg Trp Tyr Asn His Ile Lys Ser Tyr Glu Lys Glu Lys
100 105 110

Ala Ser Leu Pro Gly Val Lys Lys Ala Leu Gly Lys Tyr Gly Pro Ala 115 120 125

Asp Val Glu Asp Thr Thr Gly Ser Gly Ala Thr Asp Ser Lys Asp Asp 130 135 140

Asp Asp Ile Asp Leu Phe Gly Ser Asp Asp Glu Glu Glu Ser Glu Glu 145 150 155 160

Ala Lys Arg Leu Arg Glu Glu Arg Leu Ala Gln Tyr Glu Ser Lys Lys 165 170 175

Ala Lys Lys Pro 180

```
<211> 126
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (2)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1753
Arg Xaa Lys Xaa Xaa Xaa Thr Ala Val Arg Xaa Ser Arg Leu Val Asp
                                     10
Pro Pro Gly Cys Arg Asn Trp His Glu Val Ser Phe Cys Asp Leu Cys
             20
                                 25
Trp Asp Trp Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala
                             40
Pro Asn Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp
Ile Ser Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Tyr
 65
                     70
Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser
Asp Arg Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala
                                105
```

Ser Val Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr

120

115

```
<210> 1754
 <211> 62
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (12)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
```

```
<221> SITE
 <222> (46)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1754
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Ser Xaa Gly Gly Xaa Leu
Val His Pro Xaa Xaa Val Xaa Xaa Ala Ala His Cys Leu Lys Lys Asn
Ser Gln Xaa Trp Leu Gly Arg His Asn Leu Xaa Glu Pro Xaa Asp Thr
                             40
Xaa Gln Arg Val Pro Xaa Ser His Ser Phe Pro His Pro Leu
                         55
<210> 1755
<211> 42
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1755

Glu Xaa Cys Val Ser Xaa Leu Gly Cys Trp Arg Phe Asn Pro Gln Cys
1 5 10 15

Phe His Xaa Asn Arg Gly Pro Ile Lys Phe Asn Val Xaa Gly His Ser 20 25 30

Arg Pro Gly Glu Phe Arg Gly Leu Glu Xaa 35 40

<210> 1756

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1756

Arg Glu Gln Lys Leu Glu Leu His Arg Gly Ala Ala Ala Leu Glu Leu 1 5 10 15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Gly Met Gln Lys
20 25 30

Ala Asp Val Tyr Ser Phe Gly Ile Ile Leu Gln Glu Ile Ala Leu Arg 35 40 45

Ser Gly Pro Phe Tyr Leu Glu Gly Leu Asp Leu Ser Pro Lys Glu Ile 50 55 60

Val Gln Lys Val Arg Asn Gly Gln Arg Pro Tyr Phe Arg Pro Ser Ile 65 70 75 80

Asp Arg Thr Gln Leu Asn Glu Glu Leu Val Leu Leu Met Glu Arg Cys
85 90 95

Trp Ala Gln Asp Pro Ala Glu Arg Pro Asp Phe Gly Gln Ile Lys Gly
100 105 110

Phe Ile Arg Arg Phe Asn Lys Glu Gly Gly Thr Ser Ile Leu Asp Asn 115 120 125

Leu Leu Arg Met Glu Gln Tyr Ala Asn Asn Leu Glu Lys Leu Val

140

135

130

```
Glu Glu Arg Thr Gln Ala Tyr Leu Glu Glu Lys Arg Lys Ala Glu Ala
145
                     150
                                         155
Leu Leu Tyr Gln Ile Leu Pro His Ser Val Ala Glu Gln Leu
                 165
                                     170
<210> 1757
<211> 128
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1757
Glu Thr Xaa Lys Xaa Phe Lys Asp Pro Asn Ala Pro Lys Arg Pro Pro
                  5
                                     10
Ser Ala Phe Phe Leu Phe Cys Ser Glu Tyr Arg Pro Lys Ile Lys Gly
             20
                                 25
```

Glu His Pro Gly Leu Ser Ile Gly Asp Val Ala Lys Lys Leu Gly Glu
35 40 45

Met Trp Asn Asn Thr Ala Ala Asp Asp Lys Gln Pro Tyr Glu Lys Lys 50 55 60

Ala Ala Lys Leu Lys Glu Lys Tyr Glu Lys Asp Ile Ala Ala Tyr Arg
65 70 75 80

Ala Lys Gly Lys Pro Asp Ala Ala Lys Lys Gly Val Val Lys Ala Glu 85 90 95

Lys Ser Lys Lys Lys Glu Glu Glu Glu Asp Glu Glu Asp Glu Glu 100 105 110

Asp Glu Glu Glu Glu Glu Asp Glu Asp Glu Xaa Xaa Xaa His Xaa 115 120 125

<210> 1758

<211> 31

<212> PRT

<213> Homo sapiens

<400> 1758

Ala Arg Glu Asn Val Arg Pro Asp Tyr Leu Lys Ala Ile Trp Asn Val 1 5 10 15

Ile Asn Trp Glu Asn Val Thr Glu Arg Tyr Met Ala Cys Lys Lys 20 25 30

<210> 1759

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1759

Arg Glu Gln Lys Xaa Glu Leu His Arg Gly Ala Xaa Arg Ser Arg Thr 1 5 10 15

Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Ser Ala Arg Gln 20 25 30

Arg Xaa Lys Val Leu Ala His Phe Tyr Gly Val Lys Leu Glu Gly Lys 35 40 45

Val Pro Met His Lys Leu Phe Leu Glu Met Leu Glu Ala Met Met Asp
50 55 60

<210> 1760

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1760

Lys Met Ala Ser Asn Lys Thr Thr Leu Gln Lys Met Gly Lys Lys Gln 1 5 10 15

Asn Gly Lys Ser Lys Lys Val Glu Glu Ala Glu Pro Glu Glu Phe Val 20 25 30

Val Glu Lys Val Leu Asp Arg Val Val Asn Gly Lys Val Glu Tyr
35 40 45

Phe Leu Lys Trp Lys Gly Phe Thr Asp Ala Asp Asn Thr Trp Glu Pro 50 60

Glu Glu Asn Leu Asp Cys Pro Glu Leu Ile Glu Ala Phe Leu Asn Ser
65 70 75 80

Gln Lys Ala Gly Lys Glu Lys Asp Gly Thr Lys Arg Lys Ser Leu Ser 85 90 95

Asp Ser Gly Ser Asp Asp Ser Lys Gln Arg 100 105

```
<210> 1761
 <211> 69
 <212> PRT
 <213> Homo sapiens
 <400> 1761
 Ala Pro Ala Ser Pro Leu Leu Glu Met Asp Pro Asn Cys Ser Cys Ala
Thr Gly Gly Ser Cys Thr Cys Ala Gly Ser Cys Lys Cys Lys Glu Cys
                                  25
Lys Cys Thr Ser Cys Lys Lys Ser Cys Cys Ser Cys Cys Pro Val Gly
                              40
Cys Ala Lys Cys Ala Gln Gly Cys Val Cys Lys Gly Ala Ser Glu Lys
                          55
Cys Ser Cys Cys Ala
 65
<210> 1762
<211> 41
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1762

Pro Cys Lys Gly Ser Ile Ile Thr Trp Ser Leu Ile Xaa Asp Leu Tyr
1 5 10 15

Glu Trp Leu His Glu Gly Ser Ser Xaa Leu Leu Leu Leu Thr Ser Glu 20 25 30

Asn Asp Leu Xaa Xaa Lys Arg Arg Ala 35 40

<210> 1763

<211> 154

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1763

Pro Thr Arg Pro Pro Thr Arg Pro Pro Ser Pro Asn Met Ala Ala Ser 1 5 10 15

Ala Lys Lys Lys Asn Lys Lys Gly Lys Thr Ile Ser Leu Thr Asp Phe
20 25 30

Leu Ala Glu Asp Gly Gly Thr Gly Gly Ser Thr Tyr Val Ser Lys
35 40 45

Pro Val Ser Trp Ala Asp Glu Thr Asp Asp Leu Glu Gly Asp Val Ser 50 55 60

Thr Thr Trp His Ser Asn Asp Asp Asp Val Tyr Arg Ala Pro Pro Ile 65 70 75 80

Asp Arg Ser Ile Leu Pro Thr Ala Pro Arg Ala Ala Arg Glu Pro Asn 85 90 95

Ile Asp Arg Ser Arg Leu Pro Lys Ser Pro Pro Tyr Thr Ala Phe Leu 100 105 110

Gly Asn Leu Pro Tyr Asp Val Thr Glu Glu Ser Ile Lys Glu Phe Phe 115 120 125

Arg Gly Leu Asn Ile Ser Ala Val Arg Leu Pro Arg Glu Pro Ser Asn 130 135 140

Pro Glu Xaa Leu Lys Gly Leu Gly Met Leu

```
145
                    150
 <210> 1764
 <211> 80
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (2)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
 <221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1764
Ala Xaa Xaa Phe Pro Tyr Thr Val Asp Asn Ala Arg Ile Val Leu Xaa
Ile Asp Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Gly Xaa Tyr Glu
             20
                                 25
Thr Asp Leu Ala Met Arg Xaa Ser Val Xaa Asn Asp Ile His Gly Leu
                             40
Arg Lys Val Ile Asp Asp Thr Asn Ile Thr Arg Leu Xaa Leu Glu Thr
                        55
Glu Ile Glu Xaa Leu Xaa Glu Asp Leu Leu Phe Met Xaa Xaa Asn His
65
                                        75
```

25

Glu Glu Pro Thr Glu Lys Leu Pro Phe Pro Ile Ile Asp Asp Arg Asn 35 40 45

Arg Glu Leu Ala Ile Leu Leu Gly Met Leu Asp Pro Ala Arg Glu Gly 50 55 60

<210> 1766

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1766

Ile Arg His Glu Gln Ala Ala Ser Ser Pro Glu Pro Thr Gly Cys Leu
1 5 10 15

Leu Ser Gln Arg Arg Pro Leu Ile Thr Val Ala Met Pro Gly Gly Leu
20 25 30

Leu Leu Gly Asp Val Ala Pro Asn Phe Glu Ala Asn Thr Thr Val Gly
35 40 45

Arg Ile Arg Phe His Asp Phe Leu Gly Asp Ser Trp Gly Ile Leu Phe 50 55 60

Ser His Pro Arg Asp Phe Thr Pro Val Cys Thr Thr Glu Leu Gly Arg
65 70 75 80

Ala Ala Lys Trp His Gln Asn Leu Xaa Arg Gly Met Leu Ser 85 90

- <210> 1767 ·

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1767
 Gly Val Ser Cys Thr Xaa Pro Val Leu Gln Val Gln Arg Val Gln Met
                                     10
 His Leu Leu Gln Glu Glu Leu Leu Leu Leu Pro Cys Gly Cys Ala
                                 25
Lys Cys Ala Gln Gly Cys Ile Cys Lys Gly Ala Ser Glu Lys Cys Ser
                             40
Cys Cys Ala
     50
<210> 1768
<211> 143
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1768
Gln Arg Thr Xaa Gly Asn Xaa Xaa Ala Cys Arg Tyr Arg Thr Gly Ile
                5
                                    10
Pro Gly Ser Thr His Ala Ser Gly Arg Gly His Gly Leu Ile Ala Val
                               25
Cys Ala Leu His Ser Val Pro His Ser Pro Pro Thr Thr Cys Leu Ala
                            40
Glu Arg Thr Pro Cys Arg Arg Pro Ala Glu Met Leu Arg Leu Pro Thr
    50
                        55
```

Val Phe Arg Gln Met Arg Pro Val Ser Arg Val Leu Ala Pro His Leu

75

65

```
Thr Arg Ala Tyr Ala Lys Asp Val Lys Phe Gly Ala Asp Ala Arg Ala
                 85
 Leu Met Leu Gln Gly Val Asp Leu Leu Ala Asp Ala Val Ala Val Thr
             100
                                105
                                                     110
 Met Gly Pro Lys Gly Arg Thr Val Ile Ile Glu Gln Ser Trp Gly Ser
                             120
 Pro Lys Val Thr Arg Asp Gly Val Thr Val Ala Lys Ser Leu Thr
                         135
<210> 1769
<211> 168
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
```

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (163)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1769

Asn Ser Ala Arg Ala Cys Xaa Ala Glu Arg Thr Xaa Cys Arg Arg Pro 1 5 10 15

Ala Glu Met Leu Arg Leu Pro Thr Val Phe Arg Gln Met Arg Pro Val 20 25 30

Ser Arg Val Leu Ala Pro His Leu Xaa Arg Ala Tyr Ala Lys Xaa Val 35 40 45

Lys Phe Gly Ala Asp Ala Arg Ala Leu Met Leu Gln Gly Val Asp Leu 50 55 60

Leu Ala Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val 65 70 75 80

Ile Ile Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val 85 90 95

Thr Val Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly 100 105 110

Ala Lys Xaa Val Gln Asp Val Ala Xaa Asn Thr Ile Glu Glu Leu Gly 115 120 125

Met Ala Xaa Pro Cys Tyr Cys Tyr Gly Thr Ser Ile Ala Lys Glu Gly 130 135 140

Phe Glu Lys Val Ser Lys Val Leu Ile His Gly Asn Gln Glu Arg Cys 145 150 155 160

Asp Val Xaa Val Asp Ala Val Leu 165

<210> 1770

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1770

Gly Ala Glu Ala Phe Gly Ala Ala Lys Met Pro Asp Tyr Leu Gly Ala 1 5 10 15

Asp Gln Arg Lys Thr Lys Glu Asp Glu Lys Asp Asp Lys Pro Ile Arg
20 25 30

Ala Leu Asp Glu Gly Asp Ile Ala Leu Leu Lys Thr Tyr Gly Gln Ser 35 40 45

Thr Tyr Ser Arg Gln Ile Lys Gln Val Glu Asp Asp Ile Gln Gln Leu 50 55 60

Leu Lys Lys Ile Asn Glu Leu Thr Gly Ile Lys Glu Ser Asp Thr Gly 65 70 75 80

Leu Ala Pro Pro Ala Leu Trp Asp Leu Ala Ala Asp Lys Gln Thr Leu 85 90 95

Gln Ser Glu Gln Pro Leu Gln Val Ala Arg Cys Thr Lys Ile Ile Asn 100 105 110

Ala Asp Ser Glu Asp Pro Lys Tyr Ile Ile Asn Val Lys Gln Phe Ala 115 120 125

Lys Phe Val Val Asp Leu Ser Asp Gln Val Ala Pro Thr Asp Ile Glu 130 135 140

Glu Gly Met Arg 145

<210> 1771

<211> 45

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1771

Gly Arg Met Ala Glu Ser Ser Asp Lys Leu Tyr Arg Val Glu Tyr Ala 1 5 10 15

Lys Ser Gly Arg Ala Ser Cys Lys Lys Cys Ser Glu Thr Ser Pro Arg
20 25 30

Thr Arg Ser Gly Trp Xaa Ser Trp Cys Ile Ala His Val
35 40 45

```
<210> 1772
 <211> 81
 <212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1772
Leu Glu Ala Glu Xaa Ser Leu Ser Arg Gly Asp Trp Tyr Lys Thr Lys
Glu Ile Leu Lys Gly Pro Asp Trp Ile Leu Gly Glu Ile Lys Thr
             20
                                 25
Ser Gly Leu Arg Gly Arg Gly Gly Ala Gly Phe Pro Asn Gly Leu Lys
                             40
Trp Xaa Phe Met Ile Arg Pro Gln Met Ala Gly Pro Ser Ile Trp Trp
Xaa Asn Ala Asn Glu Gly Gly Ala Gly Xaa Leu Xaa Glu Pro Gly Gly
65
                     70
                                         75
Phe
```

```
<210> 1773
 <211> 145
 <212> PRT
 <213> Homo sapiens
<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1773
Cys Glu Lys Thr Thr Glu Gly Ala Leu Pro Ser Ser Thr Ala Ala Ala
Ser Phe Phe Cys Arg Ser Trp Cys Cys Leu Cys Ala Arg Leu Val Arg
             20
Thr Trp Tyr Leu Phe Cys Glu Ala Ala Ala Glu Glu Thr Pro Ala Leu
Ala Met Ala Asp Glu Lys Pro Lys Glu Gly Val Lys Thr Glu Asn Asn
     50
                         55
Asp His Ile Asn Leu Lys Val Ala Gly Gln Asp Gly Ser Val Val Gln
 65
                     70
Phe Lys Ile Lys Arg His Thr Pro Leu Ser Lys Leu Met Lys Ala Tyr
Cys Glu Arg Gln Gly Leu Ser Met Lys Gln Ile Arg Phe Arg Phe Xaa
            100
                                105
Gly Gln Pro Ile Asn Xaa Thr Asp Thr Pro Ala Gln Leu Gly Asn Gly
        115
                            120
Arg Met Lys Ile Pro Met Met Cys Ser Lys Gln Gln Thr Gly Gly Val
    130
                       135
                                            140
```

Tyr 145

```
<210> 1774
<211> 122
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1774
His Ala Ser Ala His Ala Ser Ala Pro Leu Ala Met Ala Ser Leu Thr
                  5
                                    10
Val Lys Ala Tyr Leu Leu Gly Lys Glu Asp Ala Ala Arg Glu Ile Arg
Arg Phe Ser Phe Cys Cys Ser Pro Glu Pro Glu Ala Gly Ser Xaa Ala
                                                 45
Ala Ala Gly Pro Gly Pro Leu Arg Ala Ala Ala Glu Pro Gly Gly Arg
                        55
                                           60
Pro Val Pro Arg Ala Ala Ala Trp Arg Leu Ser Arg Arg Thr Thr Ala
                    70
Ile Glu Asp Gly Asp Leu Leu Phe Ser Ile Asp Glu Asp Leu Thr
                85
                                    90
Trp Ala Cys Ser Thr Leu Lys Met Asn Leu Xaa Asp Phe Xaa Phe Xaa
           100
                              105
                                                   110
```

Glu Lys Xaa Phe Pro Ala Gly Thr Arg Gln 115 120

```
<210> 1775
<211> 105
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg
                  5
                                     10
```

Asn Glu Leu Arg Val Ala Pro Glu Glu His Pro Thr Leu Leu Thr Glu

20 25 30

Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met 35 40 45

Phe Glu Thr Phe Asn Val Gln Ala Met Xaa Leu Ala Ile Gln Ala Val 50 55 60

Leu Ser Leu Tyr Ala Ser Gly Xaa Thr Met Glu Ser Cys Trp Thr Leu 65 70 75 80

Glu Met Val Ser Pro Xaa Met Ser Gln Xaa Met Arg Ala Met Leu Xaa 85 90 95

Pro Met Gln Xaa Met Gly Leu Xaa Leu 100 105

<210> 1776

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

```
<222> (63)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1776
Pro Leu Arg Gly Asn Val Val Pro Ser Pro Leu Pro Thr Arg Xaa Thr
Arg Thr Phe Ser Ala Thr Val Arg Ala Ser Xaa Gly Pro Val Tyr Lys
             20
                                 25
Gly Val Cys Lys Cys Phe Xaa Arg Ser Lys Gly His Gly Phe Xaa Xaa
         35
                             40
                                                 45
Pro Ala Asp Gly Gly Pro Asp Ile Phe Leu His Ile Phe Glu Xaa Xaa
                         55
Arg Gly Ser Met Xaa Xaa Trp Lys Ala Thr Arg Ser Xaa Ile Lys Cys
65
                     70
                                         75
Ala Ser Ile Pro Pro Lys Xaa Glu Lys Leu Gln Ala Val Gly Val Arg
                 85
                                     90
```

His Gln Ser Pro Gly Thr Arg Xaa Gln Val 100 105

<210> 1777

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1777

Gly Leu Asp Met Phe Ser Phe Val Asp Leu Arg Leu Leu Leu Leu 1 5 10 15

Ala Ala Thr Ala Leu Leu Thr His Gly Gln Glu Glu Gly Gln Val Glu
20 25 30

Gly Gln Asp Glu Asp Ile Pro Pro Ile Thr Cys Val Gln Asn Gly Leu 35 40 45

Arg Tyr His Asp Arg Asp Val Trp Lys Pro Glu Pro Cys Arg Ile Cys 50 55 60

Val Cys Asp Asn Gly Lys Val Leu Cys Asp Asp Val Ile Cys Asp Glu
65 70 75 80

Thr Lys Asn Cys Pro Gly Ala Glu Val Pro 85 90

<210> 1778

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
Ile Ile Xaa Asn Thr Glu Asn Leu Val Arg Glu Leu Leu Thr Val Pro
                                     10
Asp Asn Tyr Xaa Val Ile Xaa Leu Ala Xaa Lys Trp Val Arg Pro Ile
                                 25
Xaa Cys Cys Pro Leu Xaa Leu Ile Gly Leu Lys Ala Xaa Lys Cys Ala
        35
                             40
Asp Tyr Val Val Thr Gly Thr Trp Ser Ala Lys Gly Ala Xaa Lys Thr
    50
```

```
<210> 1779
<211> 60
<212> PRT
<213> Homo sapiens
<220>
```

<221> SITE

```
<222> (60)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Trp Leu Ser Ser Thr Ala Met Tyr Ser Ala Ala Gly Arg Asp Leu Gly
                                      10
Met Glu Pro His Arg Ala Ala Gly Pro Leu Pro Ala Ala Asn Phe Arg
Pro Asp Val Phe Asn Gly Gly Asp Tyr Thr Gly Gln Leu Leu Glu Lys
                             40
Ile Leu Pro Ile Val Ala Ser Glu Tyr Ser Ile Xaa
     50
                         55
<210> 1780
<211> 60
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1780
Thr Leu Xaa Leu His Lys Ile Gln Lys Leu Arg Trp Ala Trp Cys Cys
                  5
                                     10
Xaa Pro Ile Val Pro Leu Leu Val Gly Leu Arg Gln Glu Asp His Leu
             20
                                 25
```

Ser Pro Gly Gly Arg Gly Tyr Xaa Ala Pro Arg Val His Tyr Cys Thr

35 40 45 Pro Ala Arg Ala Arg Ala Arg Pro Cys Xaa Lys 55 <210> 1781 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (23) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (41)

```
<220>
 <221> SITE
 <222> (57)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1781
 Gly Cys Arg Val Asn Gln Ala Ala Val Xaa Trp His Glu Gln Val Xaa
                                       10
 Trp Leu Ser Glu Xaa Arg Xaa Gly Glu Thr Val Tyr Tyr Arg Leu Leu
Pro Xaa Lys Asn Val Xaa Xaa Arg Xaa Ala Arg Gly Leu Val Phe Lys
          35
                              40
                                                   45
Glu Cys Arg Gln Ser Ala Ser Met Xaa Arg Val Leu Ala Val Tyr Gly
Val Lys Arg
 65
<210> 1782
<211> 152
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (149)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (150) <223> Xaa e

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (151)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1782

Arg Pro Thr Arg Pro Leu Thr Ser Thr Xaa Ala Val Gly Lys Asn Lys
1 5 10 15

Arg Leu Thr Lys Gly Gly Lys Lys Gly Ala Lys Lys Lys Val Val Asp
20 25 30

Pro Phe Ser Lys Lys Asp Trp Tyr Asp Val Lys Ala Pro Ala Met Phe 35 40 45

Asn Ile Arg Asn Ile Gly Lys Thr Leu Val Thr Arg Thr Gln Gly Thr
50 55 60

Lys Ile Ala Ser Asp Gly Leu Lys Gly Arg Val Phe Glu Val Ser Leu 65 70 75 80

Ala Asp Leu Gln Asn Asp Glu Val Ala Phe Arg Lys Phe Lys Leu Ile 85 90 95

Thr Glu Asp Val Gln Gly Lys Asn Cys Leu Thr Asn Phe His Gly Met 100 105 110

Asp Leu Thr Arg Asp Lys Met Cys Ser Met Val Lys Lys Trp Xaa Thr 115 120 125

Met Ile Glu Ala His Val Asp Val Lys Thr Thr Asp Gly Tyr Leu Leu 130 135 140

<210> 1783

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1783
His Arg Val Arg Gln Arg Xaa Pro Thr Leu Ala Arg Ala Met Ala Ser
Val Ser Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp
Glu Val Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala
Gly Val Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu
     50
Ala Asn Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly
                     70
Pro Xaa Pro Ala Ala Gly Ala Ala Pro Ala Gly Gly Pro Ala Pro Ser
Thr Ala Ala Ala Pro Ala Glu Glu Lys Lys Val Glu Ala Lys Lys Glu
            100
                                105
Glu Ser Glu Glu Ser Tyr Asp Asp Met Gly Phe Gly Leu Phe Asp
        115
                            120
<210> 1784
<211> 101
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
```

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (67)

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1784

Gly Ser Ala Ala Gly Ser Thr Ala Xaa Ser Leu Leu Ser Thr Gly Xaa l 5 10 15

Pro Arg Pro Thr Arg Pro Asp Lys Ala Arg Arg Leu Gly Tyr Lys Ala
20 25 30

Lys Gln Gly Tyr Val Ile Tyr Arg Ile Arg Val Arg Arg Gly Gly Arg
35 40 45

Lys Arg Pro Val Pro Lys Gly Ala Thr Tyr Gly Lys Pro Val His His 50 55 60

Gly Val Xaa Xaa Leu Lys Phe Ala Arg Ser Leu Gln Ser Val Ala Glu 65 70 75 80

Glu Arg Ala Gly Arg His Cys Gly Ala Leu Arg Val Leu Asn Ser Tyr 85 90 95

Trp Val Gly Glu Asp 100

<210> 1785

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1785

Ala Lys Met Gly Ala Tyr Lys Tyr Ile Gln Glu Leu Trp Arg Lys Lys

1 5 10 15

Gln Ser Asp Val Met Arg Phe Leu Leu Arg Val Arg Cys Trp Gln Tyr
20 25 30

Arg Gln Leu Ser Ala Leu His Arg Ala Pro Arg Pro Thr Arg Pro Asp 35 40 45

Lys Ala Arg Arg Leu Gly Tyr Lys Ala Lys Gln Gly Tyr Val Ile Tyr
50 55 60

Arg Ile Arg Val Arg Arg Gly Gly Arg Lys Arg Pro Val Pro Lys Gly
65 70 75 80

```
Ala Ile Thr Ala Ser Leu Ser Ile Met Val Leu Thr Ala Lys Val Cys
                  85
                                      90
 Ser Lys Pro Ser Val Arg Cys Arg Gly Ala Ser Trp Thr Pro Leu Trp
                                 105
 Gly Ser Glu Ser Pro Glu Phe Leu Leu Gly Trp
         115
                             120
<210> 1786
<211> 137
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
 <221> SITE
 <222> (57)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1786
 Ile Xaa Ile Lys Xaa Thr Xaa Thr Xaa Gly Xaa Lys Leu Xaa Leu His
                   5
                                      10
Arg Gly Gly Arg Ser Ser Thr Ser Gly Ser Pro Gly Ser Ala Gly
Ile Arg His Glu Arg Xaa Lys Arg Asp Asp Glu Gly Thr Ser Ser Phe
Gly Lys Arg Arg Asn Lys Thr His Xaa Leu Cys Arg Arg Cys Gly Ser
                         55
Lys Ala Tyr His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro
                     70
Ala Lys Arg Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg
Asn Thr Thr Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg
            100
                                105
                                                    110
Arg Phe Arg His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg
                            120
Ala Ala Val Ala Ala Ser Ser Ser Ser
                       135
<210> 1787
<211> 128
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1787

Leu Xaa Leu Thr Lys Gly Xaa Lys Ser Trp Gly Ser Thr Ala Val Thr 1 5 10 15

Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg
20 25 30

Gly Arg Gly Asp Met Ala Lys Arg Thr Lys Lys Val Gly Ile Val Gly
35 40 45

Lys Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys Met Val Lys Lys 50 55 60

Ile Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser Phe Cys Gly Lys 65 70 75 80

Thr Lys Met Lys Arg Arg Ala Val Gly Ile Trp His Cys Gly Ser Cys
85 90 95

Met Lys Thr Val Ala Gly Gly Ala Trp Thr Tyr Asn Thr Thr Ser Ala 100 105 110

Val Thr Val Lys Ser Ala Ile Arg Arg Leu Lys Glu Leu Lys Asp Gln 115 120 125

<210> 1788

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1788

Arg Gly Asp Met Ala Lys Arg Thr Lys Lys Val Gly Ile Val Gly Lys
1 5 10 15

Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys Met Val Lys Lys Ile
20 25 30

Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser Phe Cys Gly Lys Thr 35 40 45

Lys Met Lys Arg Arg Ala Val Gly Ile Trp His Cys Gly Ser Cys Met 50 55 60

Lys Thr Val Ala Gly Gly Ala Trp Thr Tyr Asn Thr Thr Ser Ala Val 65 70 75 80

Thr Val Lys Ser Ala Ile Arg Arg Leu Lys Glu Leu Lys Asp Gln

85 90 95

```
<210> 1789
<211> 113
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1789
Gln Ser Leu Gly Arg Gly Asp Met Ala Lys Arg Thr Lys Lys Val Gly
                  5
                                                         15
Ile Val Gly Lys Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys Met
                                 25
Val Lys Lys Ile Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser Phe
                             40
Cys Gly Lys Thr Lys Met Lys Arg Arg Ala Val Gly Ile Trp His Cys
     50
                         55
                                             60
```

```
Gly Ser Cys Met Lys Thr Val Xaa Gly Gly Xaa Trp Thr Tyr Asn Thr
 65
                     70
                                         75
Thr Ser Ala Val Thr Val Lys Val Arg His Gln Lys Xaa Glu Gly Val
                 85
                                      90
Glu Arg Pro Leu Asp Val Pro Xaa Xaa Phe Gly Thr Ser Leu Xaa Tyr
                                 105
Asn
<210> 1790
<211> 24
<212> PRT
<213> Homo sapiens
<400> 1790
Ile Pro Cys Leu Lys Pro Lys Asn Phe Gly Ile Gly Gln Asp Ile Gln
Pro Lys Arg Asp Ser Pro Ala Leu
             20
<210> 1791
<211> 70
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (49)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Arg Arg Cys Ala Leu Arg Ala Val Asp Phe Ala Glu Arg Asn Gly Tyr
                                      10
Ile Lys Gly Ile Val Lys Asp Ile Ile His Asp Pro Gly Arg Gly Xaa
Pro Leu Ala Lys Val Val Phe Arg Asp Pro Xaa Arg Leu Arg Ser Xaa
                             40
Xaa Glu Leu Phe Ile Ala Ala Glu Gly Ile His Thr Gly Gln Phe Val
                         55
Tyr Cys Arg Lys Lys Ala
 65
<210> 1792
<211> 110
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1792
Gly Arg Val Xaa Arg Pro Thr Arg Pro Xaa Glu Xaa Arg Gly Gly Gly
Gly Leu Gly Ala Phe Lys Ile Gln Leu His Xaa Xaa Ala Thr Gly Met
             20
                                 25
                                                      30
Ala Glu Glu Gly Ile Ala Ala Gly Gly Val Met Asp Val Asn Thr Ala
                             40
```

Leu Gln Glu Val Leu Lys Thr Ala Leu Xaa His Asp Gly Leu Ala Arg

50 55 60

Gly Ile Arg Glu Ala Ala Lys Ala Leu Asp Lys Arg Gln Ala His Leu 65 70 75 80

Cys Xaa Leu Ala Ser Asn Xaa Asp Glu Pro Met Tyr Xaa Lys Xaa Xaa 85 90 95

Glu Ala Leu Xaa Ala Glu His Gln Xaa Asn Leu Ile Lys Gly
100 105 110

<210> 1793

<211> 92

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1793

Leu Val Pro Asn Ser Ala Arg Ala Ala Ile Met Gly Arg Met His Ala 1 5 10 15

Pro Gly Lys Gly Leu Ser Gln Ser Ala Leu Pro Tyr Arg Arg Ser Val 20 25 30

Pro Thr Trp Leu Lys Leu Thr Ser Asp Xaa Xaa Lys Glu Gln Ile Tyr 35 40 45

Lys Leu Ala Lys Lys Gly Leu Thr Pro Ser Gln Ile Gly Val Ile Leu 50 55 60

Arg Asp Ser His Gly Val Ala Gln Val Arg Phe Val Thr Gly Asn Lys 65 70 75 80

Ile Leu Arg Ile Leu Lys Ser Lys Gly Leu Ala Pro 85 90

<210> 1794

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1794

Ile Ala Ile Val Asn Asp Thr Val Thr Ile Arg Thr Arg Lys Phe Met

1 5 10 15

Thr Asn Arg Leu Leu Gln Arg Lys Gln Met Val Ile Asp Val Leu His
20 25 30

Pro Gly Lys Ala Thr Val Pro Lys Thr Glu Ile Arg Glu Lys Leu Ala 35 40 45

Lys Met Tyr Lys Thr Thr Pro Asp Val Ile Phe Val Phe Gly Phe Arg 50 55 60

Thr His Phe Gly Gly Gly Lys Thr Thr Gly Phe Gly Met Ile Tyr Asp
65 70 75 80

Ser Leu Asp Tyr Ala Lys Lys Asn Glu Pro Lys His Arg Leu Ala Arg 85 90 95

His Gly Leu Tyr Glu Lys Lys Lys Thr 100 105

<210> 1795

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1795

Val Asp Pro Arg Val Arg Tyr Asp Thr Lys Gly Arg Phe Ala Val His 1 5 10 15

Arg Ile Thr Pro Glu Glu Ala Lys Tyr Lys Leu Cys Lys Val Arg Lys 20 25 30

Ile Phe Val Gly Thr Lys Gly Ile Pro His Leu Val Thr His Asp Ala 35 40 45

Arg Thr Ile Arg Tyr Pro Asp Pro Leu Ile Lys Val Asn Asp Thr Ile 50 55 60

Gln Ile Asp Leu Glu Thr Gly Lys Ile Thr Asp Phe Ile Lys Phe Asp
65 70 75 80

Thr Gly Asn Leu Cys Met Val Thr Gly Gly Ala Asn 85 90

```
<210> 1796
<211> 130
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1796
Gly Ile Phe Arg Asp Asn Trp His Lys Arg Arg Lys Thr Gly Gly Lys
Arg Lys Pro Tyr His Lys Lys Arg Lys Tyr Glu Leu Gly Arg Pro Ala
             20
                                 25
                                                      30
Ala Asn Thr Lys Ile Gly Pro Arg Arg Ile His Thr Val Arg Val Arg
                             40
Gly Gly Asn Lys Lys Tyr Arg Ala Leu Arg Leu Asp Val Gly Asn Phe
Ser Trp Gly Ser Glu Cys Cys Thr Arg Lys Thr Arg Ile Ile Asp Val
65
                     70
                                         75
Val Tyr Asn Ala Ser Asn Asn Glu Leu Xaa Arg Thr Lys Thr Leu Val
                 85
                                     90
Lys Asn Cys Ile Xaa Leu Ile Asp Ser Thr Pro Tyr Arg Gln Trp Tyr
                                105
Xaa Val Pro Leu Cys Ala Ala Pro Gly Pro Gln Glu Gly Ser Gln Ala
                            120
                                                125
Asp Ser
```

```
<210> 1797
 <211> 106
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
 <221> SITE
 <222> (106)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Pro Arg Ala Gly Gly Cys Gly Gly Ser Gly Arg Val Thr Ala Cys Leu
                                      10
Cys Ala Cys Ala Thr Leu Val Trp Pro Pro Arg Phe Gln Glu Val Leu
Leu Val Leu Ser Gly Leu Val His Ala Arg Gly Cys Thr Tyr Xaa Gln
                             40
Leu Trp Ser Arg Ser His Pro Phe Cys Cys Xaa Arg Gly Pro Leu Ala
                         55
Met Ala Gly Ile Leu Phe Glu Asp Ile Phe Asp Val Lys Asp Ile Xaa
                     70
Pro Glu Gly Lys Lys Phe Xaa Arg Val Ser Arg Xaa His Cys Glu Ser
                                      90
Glu Xaa Xaa Arg Trp Xaa Xaa Thr Lys Xaa
            100
<210> 1798
<211> 140
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
```

<221> SITE

```
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
Lys Xaa Xaa Glu Pro Xaa Xaa Arg Ile Glu Arg Ala Xaa Xaa Xaa
                 5
Leu Lys Lys Ser Gly Lys Leu Lys Val Pro Glu Trp Val Asp Thr Val
                                 25
Lys Leu Ala Lys His Lys Glu Leu Ala Pro Tyr Asp Glu Asn Trp Phe
                             40
Tyr Thr Arg Ala Ala Ser Thr Ala Arg His Leu Tyr Leu Arg Gly Gly
     50
                         55
Ala Gly Val Gly Ser Met Thr Lys Ile Tyr Gly Gly Arg Gln Arg Asn
Gly Val Met Pro Ser His Phe Ser Arg Gly Ser Lys Ser Val Ala Arg
                                     90
Arg Val Leu Gln Ala Leu Glu Gly Leu Lys Met Val Glu Lys Asp Gln
           100
                                105
Asp Gly Gly Arg Lys Leu Thr Pro Gln Gly Gln Arg Asp Leu Asp Arg
Ile Ala Gly Gln Val Ala Ala Ser Asn Lys Lys His
                       135
```

```
<210> 1799
<211> 126
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1799
Val Asp Pro Arg Val Arg Lys Thr Val Xaa Glu Leu Asp Lys Gly Met
Gln Glu Arg Thr Gly Ala Ala Thr Ala Arg Arg Glu Ser Leu Pro Gln
Ala Asn Asn Pro Glu Gln Leu Cys Lys Gln Arg Cys Ile Asn Glu Ala
Ser Trp Thr Met Lys Leu Val Leu Ser Cys Val Pro Glu Pro Thr Val
                       55
Val Met Ala Ala Arg Ala Leu Cys Met Leu Gly Leu Val Leu Ala Leu
                   70
                            75
Leu Ser Ser Ser Ser Ala Arg Glu Leu Arg Gly Ala Cys Leu Pro Asn
                85
Gln Cys Ala Val Pro Ala Lys Asp Arg Val Glu Leu Arg Leu Thr Pro
                             105
Met Phe Thr Pro Lys Asp Cys Lys Asn Arg Gly Cys Cys Xaa
                          120
```

<210> 1800 <211> 140 <212> PRT <213> Homo sapiens <220> <221> SITE

```
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1800
Gly Tyr Leu His Ser Leu Asn Ile Val Tyr Arg Asp Leu Lys Pro Glu
Asn Ile Leu Leu Asp Ser Gln Gly His Ile Val Leu Thr Asp Phe Gly
             20
Leu Cys Lys Glu Asn Ile Glu His Asn Ser Thr Thr Ser Thr Phe Cys
Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu His Lys Gln Pro Tyr
                         55
Asp Arg Thr Val Asp Trp Trp Cys Leu Gly Ala Phe Leu Tyr Glu Met
65
                    70
Leu Tyr Gly Leu Pro Pro Phe Tyr Ser Arg Asn Thr Ala Glu Met Tyr
Asp Asn Ile Leu Asn Lys Pro Leu Gln Leu Lys Pro Asn Ile Thr Asn
                               105
Ser Ala Arg His Leu Leu Glu Gly Leu Leu Xaa Lys Asp Xaa Thr Lys
       115
                           120
Arg Leu Gly Gly Xaa Gly Asp Phe Met Glu Ile Lys
   130
                       135
```

<211> 92 <212> PRT <213> Homo sapiens

<220> <221> SITE

<222> (77)

<210> 1801

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Thr Met Pro Gln Tyr Gln Thr Trp Glu Glu Phe Ser Arg Ala Ala
                                     10
Glu Lys Leu Tyr Leu Ala Asp Pro Met Lys Ala Arg Val Val Leu Lys
                                 25
Tyr Arg His Ser Asp Gly Asn Leu Cys Val Lys Val Thr Asp Asp Leu
                    40
Val Cys Leu Val Tyr Lys Thr Asp Gln Ala Gln Asp Val Lys Lys Ile
     50
                         55
Glu Lys Phe His Ser Gln Leu Met Arg Leu Ile Val Xaa Gln Gly Ala
                                         75
Xaa Asn Leu Pro Trp Glu Leu Ser Glu Trp Phe Xaa
                 85
<210> 1802
<211> 176
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (19)

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1802
Arg Gly Ala Xaa Arg Ser Arg Thr Ser Gly Ser Pro Gly Xaa Ala Gly
                                     10
```

1.

Ile Arg Xaa Arg Xaa Val Ser Gln Lys Thr Val Ile Ile Lys Glu Glu 20 25 30

Glu Glu Asp Thr Ala Glu Lys Pro Gly Lys Glu Glu Asp Val Val Thr 35 40 45

Pro Lys Pro Xaa Lys Arg Lys Arg Asp Gln Ala Glu Glu Glu Pro Asn 50 55 60

Arg Ile Pro Ser Arg Xaa Leu Arg Arg Thr Lys Leu Asn Gln Glu Ser 65 70 75 80

Thr Ala Pro Lys Val Leu Phe Thr Gly Val Val Asp Ala Arg Gly Xaa 85 90 95

Arg Ala Val Leu Ala Trp Gly Glu Ile Trp Leu Val His Gly Gln Ser 100 105 110

Phe Pro Xaa Val His Gly Ser His Pro Pro Asp Ile Gln Phe Leu Cys 115 120 125

Gly Pro Gly Ala Gly Xaa Ser Pro Phe Cys Ser Xaa Asp Gly Trp His 130 135 140

His Ser Arg Gln Ala Gly Phe Leu Leu Thr Pro Asp Glu Tyr Val Val 145 150 155 160

Asn Asp Xaa Ala Pro Xaa Glu Glu Phe Gly Phe Thr Phe Lys Thr His 165 170 175

<210> 1803

<211> 39

<212> PRT

<213> Homo sapiens

<400> 1803

Gly Ser Leu Ala Val Thr Lys Asn Asp Gly His Tyr Arg Gly Asp Pro 1 5 10 15

Asn Trp Phe Met Lys Tyr Val Ala Pro Arg Glu Leu Gly Ser Pro His

Gly Val Gly Gly Leu Phe

<210> 1804

```
<211> 42
<212> PRT
<213> Homo sapiens
<400> 1804
Gly Ser Leu Leu Ser Pro Asp Met Ala Asn Lys Gly Pro Ser Tyr Gly
Met Ser Arg Glu Val Gln Ser Lys Ile Glu Lys Lys Tyr Asp Glu Glu
                                  25
Leu Gly Gly Ala Ala Gly Gly Val Gly Pro
         35
<210> 1805
<211> 165
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (130)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
```

1.

```
<223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (137)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1805 Phe Gly Thr Arg Leu Asp Gln Ile Arg Gln Arg Glu Ser Asp Ile Thr 10 Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr Phe Val Glu Ala 40 Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp Leu Lys Arg Ile 55 Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu Ala Asn Leu Glu Gly Glu Glu Thr Phe Glu Ala Ala Met Leu Gly Gln Ala Glu Glu Val 85 Val Gln Glu Arg Phe Cys Asp Asp Glu Leu Ile Leu Ile Xaa Ile Pro 100 105 Arg Xaa Asp Gly Xaa Ile Gly Phe Phe Arg Gly Ala Lys Phe Ser Arg 120 Xaa Xaa Gly Gly Leu Xaa Lys Xaa Leu Phe Gly Xaa Xaa Phe Gly 130 135 Xaa Ile Gly Xaa Pro Gly Val Leu Lys Xaa Xaa Xaa Pro Lys Ile Xaa 145 150 155 Pro Gly Xaa Asp Leu <210> 1806

<210> 1806
<211> 91
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
 <221> SITE
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1806
Ile Ala Gly Lys Leu Gln Asp Gly Leu Leu Xaa Ile Thr Xaa Xaa Ser
                                     10
Phe Xaa Ala Pro Trp Asn Ser Leu Ser Leu Ala Xaa Ala Gly Ala Ser
             20
                                 25
                                                      30
Pro Arg Pro Thr Leu Leu Ala Val Arg Asn Ala Gln Cys Phe Pro Val
                             40
                                                 45
Tyr Pro Ser Pro Val Lys Leu Gln Ser Gly Thr His Cys Leu Trp Thr
Asp Gln Leu Leu Gln Gly Ser Glu Lys Gly Phe Gln Phe Pro Xaa Thr
65
                                         75
Leu Xaa Gly Leu Thr Ser Gly Ser Xaa Gly Leu
                 85
```

```
<210> 1807
 <211> 123
 <212> PRT
 <213> Homo sapiens
<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1807
Ala Arg Pro Ser Arg Arg Arg Arg Arg Arg Arg Pro Leu Gly Leu
       5
                                   10
Ala Met Ser Ser Pro Val Lys Arg Gln Arg Met Glu Ser Ala Leu
Asp Gln Leu Lys Gln Phe Thr Thr Val Val Ala Asp Thr Gly Asp Phe
His Ala Ile Asp Glu Tyr Lys Pro Gln Asp Ala Thr Thr Asn Pro Ser
                        55
Leu Ile Leu Ala Ala Ala Gln Met Pro Ala Tyr Gln Glu Leu Val Glu
 65
                                       75
Glu Ala Ile Ala Tyr Gly Arg Lys Leu Gly Gly Ser Gln Glu Asp Gln .
                                    90
Ile Lys Asn Ala Ile Xaa Lys Leu Phe Val Leu Phe Gly Ala Glu Ile
                     105
Leu Lys Lys Ile Pro Gly Arg Val Ser Thr Glu
       115
                          120
<210> 1808
<211> 131
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (114)

...

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1808 Arg Leu Arg Gly Gly Cys Ser Val Leu Ser Val Gln Ala Ala Gly 5 10 Leu Ser Gln Arg Arg Pro Pro Phe Thr Leu Arg Ala Arg Ser Pro Ala 20 25 Val Leu Pro Phe Arg Cys Pro Pro Cys His His Asp Gly Thr Gly His Leu Leu Arg Gln Arg Leu Leu Gly Arg Xaa Ile Ala Ala Ile Ser 55 Lys Thr Ala Val Ala Pro Ile Glu Arg Val Lys Leu Leu Gln Val 70 Gln His Ala Ser Lys Gln Ile Ala Ala Asp Lys Gln Tyr Lys Gly Ile 90 Val Asp Cys Ile Val Arg Ile Pro Arg Ser Arg Arg Val Ser Phe Trp 100 Arg Xaa Thr Leu Gln Arg His Arg Tyr Phe Pro Xaa Lys Pro Gln Phe 120 125

Ala Ser Arg 130

<222> (47)

<210> 1809 <211> 93 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1809
Asp Trp Ser Lys Val Val Leu Ala Tyr Glu Pro Val Trp Ala Ile Gl

Asp Trp Ser Lys Val Val Leu Ala Tyr Glu Pro Val Trp Ala Ile Gly
1 5 10 15

Thr Gly Lys Thr Ala Thr Pro Gln Gln Ala Gln Glu Val His Glu Lys
20 25 30

Leu Arg Gly Trp Leu Lys Ser Asn Val Ser Asp Ala Val Ala Xaa Ser 35 40 45

Thr Arg Ile Ile Tyr Gly Gly Ser Val Thr Gly Ala Thr Cys Lys Glu
50 55 60

Leu Ala Ser Gln Pro Asp Val Asp Gly Phe Leu Val Gly Gly Ala Ser 65 70 75 80

Leu Lys Pro Glu Phe Val Asp Ile Ile Asn Ala Lys Gln 85 90

<210> 1810

<211> 150

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

••

```
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
                                                    <222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids
Ile Arg His Glu Gly Arg Gly Ile Xaa Ile Glu Arg Val Val Ser Ser
Glu Gly Gly Arg Pro Ser Val Asp Leu Ser Phe Gln Pro Ser Lys Pro
                                 25
Leu Ser Lys Ser Ser Ser Ser Pro Glu Leu Gln Thr Leu Gln Asp Ile
                            40
Leu Gly Asp Pro Gly Asp Lys Ala Asp Val Gly Arg Xaa Ser Pro Xaa
     50
                         55
Val Lys Ala Arg Ser Gln Ser Gly Xaa Leu Asp Gly Glu Ser Xaa Ala
Trp Ser Val Ser Gly Glu Asp Ser Xaa Xaa Gln Pro Glu Gly Pro Leu
                                    90
Thr Ser Arg Xaa Pro Arg Phe Ala Gln Val Xaa Ser Gly Pro Val Gly
            100
                                105
Tyr Asn Ile Xaa Xaa Xaa Xaa Pro Ser Arg Xaa Gly Lys Xaa Leu Glu
        115
                            120
Arg Asp Ala Leu Arg Ala Glu His Ser Xaa Ile Gln Arg Ser Ser Arg
                    135
                                           140
Ile Thr Xaa Phe Val Ser
145
                   150
<210> 1811
<211> 189
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (178)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1811

Gly Arg Xaa Gln Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro 1 5 10 15

Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe
20 25 30

Gly Thr Ser Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn Glu 35 40 45

Phe Val Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys Val 50 55 60

Glu Leu Glu Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe Leu 65 70 75 80

Arg Thr Leu Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile Ser 85 90 95

Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Leu 100 105 110

Asp Gly Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala Lys 115 120 125.

Cys Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu Thr 130 135 140

Leu Gln Ala Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr Arg 145 150 155 160

Asn Xaa Ile Ser Glu Met Asn Arg Ala Xaa Gln Arg Leu Gln Ala Glu 165 170 175

Ile Xaa Asn Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala 180 185 <210> 1812

```
<211> 42
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1812
Leu Leu Ala Ser Leu Ala Asn Leu Ala Leu Pro Xaa Xaa Ile Asn Leu
Leu Gly Glu Leu Ser Val Ala Ser Asn Xaa Val Leu Leu Ile Lys Tyr
             20
                                 25
His Ser Pro Thr Tyr Arg Asn Ser Thr Tyr
         35
                             40
<210> 1813
<211> 121
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1813
Trp Pro Pro Val Leu Ala Phe Leu Gly Cys Val Trp Ser Leu Gly Pro
                                    10
Cys Leu Trp Gly Lys Ser Asn Arg Thr Leu Ala Leu Pro Lys Met Lys
Gly Glu Glu Met Gly Leu Leu Phe Leu Ser Pro Glu Trp Glu Arg Ser
                            40
Ser Gly Gly Trp Ser Phe Ser Thr Glu Glu Gly Ser Leu Lys Ala Leu
                        55
Leu Thr Ser Cys Cys Thr Phe Cys Ile Ser Leu His Ala His Cys Leu
                           . 75
                    70
65
Phe Leu Phe Leu Ala Leu Ala Pro Val Pro Val Pro Ala Pro Ala Asn
                                     90
Ala Lys Met Gln Met His Xaa Leu Ala Xaa Arg Val Xaa Ala Gly Leu
                               105
Ser Cys Glu Xaa Gly Gly Trp Ala Xaa
                           120
        115
```

```
<210> 1814
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1814
Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
                                     10
Xaa Xaa Pro Xaa Ser Ala Pro His Xaa Ser Ser Pro
             20
                                 25
<210> 1815
<211> 79
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
                                                         . ....
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1815
Ile Arg Xaa Ser Gly Asn Ala Asn Xaa Glu Asn Gly Glu Gln Glu Ala
                                     10
Asp Asn Glu Val Asp Glu Xaa Glu Glu Glu Gly Gly Glu Glu Glu Glu
```

20 25 30

Glu Glu Glu Glu Gly Asp Gly Glu Glu Asp Gly Asp Glu Asp Glu 35 40 45

Glu Ala Glu Xaa Ser Tyr Gly Pro Ser Gly Gln Leu Lys Met Met Arg
50 55 60

Met Thr Met Ser Ile Pro Arg Ser Arg Arg Pro Thr Arg Met Thr 65 70 75

<210> 1816

<211> 21

<212> PRT

<213> Homo sapiens

<400> 1816

Lys Leu Lys Pro Gly Ala Ile Asp Ile Val Pro Gln Gly Lys Met Lys

1 10 15

Asn Tyr Asn Gln Ala 20

<210> 1817 <211> 76

<212> PRT

<213> Homo sapiens

<400> 1817

Gly Lys Arg Gly Glu Ala Phe Pro Arg Ser Ser Gln Arg Trp Arg Phe 1 5 10 15

Gly Arg Gly Phe Gly Gly Cys Ser Arg Phe Ala Gly Thr Leu Val Ile 20 25 30

Ser Leu Ala Pro Leu Leu Pro Ala His Ser Pro Gly Leu Ala Gln Tyr 35 40 45

Ile Gly Thr Cys Gly Phe Tyr Phe Val Phe Asp Val Pro Asp Arg Asn 50 55 60

Arg Ala Arg Gly Thr Ala Lys Thr Thr Val Gly Ser 65 70 75

.. ..

```
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<22'0>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1818
His Xaa Ile Xaa Xaa Tyr Xaa Xaa Pro Xaa Pro Lys Arg Xaa Xaa Asn
                  5
                                     10
Thr Ala Cys Thr Ser Gln Arg Lys Ile Gln Asn Thr Thr Gln Xaa Ser
             20
                                 25
Xaa Thr Glu Glu Xaa Phe Pro Pro Thr Xaa Thr Pro Gly Leu His Gln
                             40
Pro Asn Xaa Thr Xaa Val Gly Phe Gly Phe Asp Ser Gln Xaa Val Leu
                         55
```

```
Cys Trp Leu Gln Arg Ile Asp Xaa Leu Asp Gly Xaa
  65
                        70
  <210> 1819
  <211> 44
 <212> PRT
  <213> Homo sapiens
  <400> 1819
 Arg Met Phe Leu Leu Pro Lys Asn Val Lys Pro Thr Met Glu Asp Trp
                                        10
 Gly Arg Gly Gly Met Lys Tyr Lys Ile Met Ile Ile Tyr Thr Glu Leu
 Gly Phe Phe Met Phe Cys Lys Lys Val Phe Ile Ser
           35
                                40
 <210> 1820
 <211> 36
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (32)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (35)
 <223> Xaa equals any of the naturally occurring L-amino acids
         والمعارف والمناف والمستخدم والمناف والمناف والمناف والمناف والمناف والمناف والمناف والمناف والمستخدم والمناف والمناف
- <220>
 <221> SITE
 <222> (36)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1820
 Xaa Ser Gly Ile Gly Arg Gly Ala Leu Arg Leu Lys Ser Phe Thr Ser
                                         10
```

```
25
Lys Lys Xaa Xaa
        35
<210> 1821
<211> 32
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1821
Xaa Asn Thr Leu Xaa Gly Val Lys Met Lys Ile Xaa Thr Gln Asp Met
Asn Ile Phe Ser Cys Asn Leu Thr Ile Lys Ala Phe Ser His Thr Xaa
            20
                                 25
```

and the contract of the contra

<210> 1822 <211> 39 <212> PRT <213> Homo sapiens

<220>

```
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Kaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1822
Gly Xaa Gly Xaa Asn Pro Ala Ser Thr Lys Asn Thr Lys Lys Lys
                                  10
20
                              25
                                                 30
Lys Lys Xaa Lys Xaa Xaa Xaa
        35 - -
```

<210> 1823

<211> 118

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (23) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1823 Xaa Asn Xaa Ser Ile Thr His Cys Thr His Gln Gly Lys Pro Gly Tyr 5 15 Ala Xaa Gln Val Thr Gly Xaa Gly Asn Ser Arg Val Asp Pro Arg Val 20 Arg Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Ser Cys His 40 Asp Leu Tyr Leu Met Val Phe Ile Ser Arg Val His Leu Arg Glu Ala 50 55 Thr Leu Ser Ser Arg Ala Gln Met Glu Arg Arg Phe Cys Ala Val Gly Ser Xaa Leu Pro Arg Ser Gly Val Arg Glu Glu Asn Tyr Pro Ala Gly 90 Phe Asn Leu Phe His Pro Val Cys Ser Pro Gly Val Ala Ser Ala Leu 105 110 100

Arg Thr Ile Arg Phe Thr 115

```
<210> 1824
<211> 95
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1824
Asp Gln Gly Cys Ser Val Arg Ala Pro Pro Arg His Asp Phe Leu Gln
 1
                  5
                                     10
                                                          15
Leu Ser Pro Val Val Gly His Val Val Leu Arg Arg Pro Gly Arg Arg
             20
Leu Arg Gly Val Leu Gly Arg Gly Ser Pro Phe Ala Arg Pro Ala Phe
                             40
Thr Gly Ala Pro Ala Ala Ala Tyr Pro Xaa Pro Pro Pro Ala Leu
    50
                                             60
                         55
Cys Pro Arg Pro Pro Arg Gly Pro Thr Xaa Val Xaa Lys Xaa Gly Val
65
                     70
                                        75
```

Leu Asn Arg Xaa Xaa Thr Gly Cys Trp Ala Gly Asn Glu Glu Ala 85 90 95

```
<210> 1825
<211> 17
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1825
Xaa Tyr Ser Glu Ser Xaa Tyr Asn Ser Leu Ala Val Val Leu Gln Pro
                                     10
                                                          15
Arg
<210> 1826
<211> 69
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>

```
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1826
Thr Cys Arg Ala Leu Leu Arg Arg Xaa Ala Val Phe Gln Pro Ser Pro
Asn Ala Phe Phe Arg Cys Val Ser Glu Asp Leu Gly Phe Ala Val Leu
Xaa Thr Gln Leu Met Leu Xaa Xaa Leu Arg Phe Thr Gly Phe Ile Thr
                             40
Val Gly Ile Thr Pro Lys Ala Ser Pro Leu His Val Thr Glu His Val
                        55
                                             60
Leu Asn Gln Arg Ser
 65
<210> 1827
<211> 167
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220> <221> SITE <222> (147) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (159) <223> Xaa equals any of the naturally occurring L-amino acids Gly Glu Ala Phe Gly Ser Thr Leu Trp Asp Gly Pro Trp Arg Ala Leu 10 Pro Xaa Xaa Xaa Gly Trp Arg Arg Lys Arg Pro Ile Trp Gly Trp Gly 25 Pro Pro Ser Pro Trp Asn Xaa Ser Gly Ser Asp Ala Trp Cys Ala Trp 35 40 Ser Thr Arg Glu Leu Val Arg Asp Val Ala Lys Met Leu Pro Thr Leu 55 Gly Gly Glu Arg Lys Gly Ser Pro Arg Ile Leu Pro Arg Xaa Pro Pro 70 Arg Lys Leu Gly Xaa Leu Phe Leu Pro Gly Ala Gln Gly Thr His Tyr 85 Leu Xaa Pro Pro Xaa Val Trp Ala Gln Thr Arg Phe Pro Xaa Thr Xaa 100 105 Gln Xaa Leu Leu Ala Ser Pro Phe Pro Xaa Xaa Lys Lys Gln Lys 120 Gly Gly Lys Lys Arg Gly Xaa Leu Gly Gly Pro Phe Lys Gly Pro 130 135 Pro Xaa Xaa Arg Phe Pro Phe Leu Lys Ile Gly Lys Asn Pro Xaa Gly 145 150 155 160

<210> 1828

<211> 23

<212> PRT

<213> Homo sapiens

Val Pro Ser Ser Pro Pro Phe

```
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1828
Pro Tyr Ser Glu Ser Tyr Tyr Asn Ser Leu Ala Val Val Leu Gln Arg
                                     10
Arg Xaa Val Xaa Asn Xaa Xaa
            20
<210> 1829
<211> 35
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (9)

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1829
Xaa Arg Xaa Lys His Met Xaa Phe Xaa Phe Xaa Leu Thr Leu Xaa Leu
                                     10
Pro Thr Ser Xaa Pro Glu Gln His Xaa Ser Cys Phe Asp Thr His Leu
                                 25
His Leu Tyr
         35
<210> 1830
<211> 74
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
```

```
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1830
Pro Arg Ser Pro Arg Val Leu His His Val Ser Val Leu Trp Gly Gly
                  5
                                     10
Ser Lys Gly Pro Trp Ser Trp Pro Arg Pro Arg His Arg Glu Arg Leu
Asp Phe Leu Ser Leu Cys Ala Glu Xaa Leu Arg Trp Arg Pro Leu Ser
                             40
Leu Thr Gln Gln Leu Lys His Thr Ile Ser Gly Ser Xaa Trp Leu Pro
                         55
     50
                                             60
His Pro Leu Xaa Cys Pro Leu Xaa Ser Xaa
65
                     70
<210> 1831
<211> 43
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
                                                  . . . .
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1831 Gly Thr Ser Gly Thr Arg Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser Glu Ser Tyr Tyr Asn Ser Leu Ala Val Leu Gln Leu Arg Asp Xaa 25 Gly Asn Xaa Lys Tyr Phe Arg Ala Arg Met Xaa 40 <210> 1832 <211> 66 <212> PRT <213> Homo sapiens <400> 1832 Glu Asn Leu Phe Ile Tyr Cys Leu Leu Val Met Gly Glu Gly Arg 5 Phe Lys Gly Pro Gly Thr Trp Glu Pro Ser His Arg Asp Gln Arg Gly 20 25 Leu Ser Leu Asn Thr Thr Gly Val Tyr Ser Gly Ser Ser Thr Gln Leu 40 Leu Gly Ser Cys Pro Asn Gly Pro Pro Leu Gln His Pro Ser Trp Arg 55 Arg Gly 65 <210> 1833 <211> 40 <212> PRT <213> Homo sapiens <220> The second secon <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (30)

```
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
Ser Phe Pro Arg Thr Thr Gly Val Ser Ser Leu Ile Val Cys Tyr Ala
Met Xaa His Leu Lys Gln Tyr Phe Ile Leu Leu Phe Phe Xaa Lys Thr
                                 25
Gln Asn Thr Cys Asn Xaa Lys Pro
         35
                             40
<210> 1834
<211> 71
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Xaa Arg Val Gly Gly Thr His Ala Ser Val Asp Pro Arg Val Arg
                                     10
Asp Leu Gly Asn Tyr Pro Asn Lys Leu Xaa Ser Pro Leu Ser Cys Gln
                             . 25
Tyr Trp Asn Cys Ser Ser Gln Val Phe Ala Xaa Ile Ser His Pro Glu
                             40
Arg Lys Asn Asp Arg Glu Asn Leu Cys Ser Asp Thr Thr Asp Ser Tyr
                                             60
                         55
```

Ile Val Glu Gln Tyr Leu Ser

. · ·

65 70

<210> 1835

WO 00/55174

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1835

Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Gly Asn Leu Thr Gly Ser
1 5 10 15

Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Trp Arg Glu 20 25 30

Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Xaa His Gln Leu 35 40 45

Arg Lys Arg Ser Ser Ser Thr Pro Thr Thr 50 55

<210> 1836

<211> 80

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1836

Val Cys Trp Pro Val Gly Phe Gly Thr Ser Phe Ser Glu Arg Arg 1 5 10 15

Lys Leu Pro Trp Leu Glu Pro Cys Ser Ala Gly Lys Gly Val Trp Arg 20 25 30

Pro Leu Leu Gly Lys Trp Arg Thr Thr Ser Gly Ala Glu Glu Ala Cys 35 40 45

Xaa Arg Lys Val Ser Arg Ile His His Lys Arg Ala Thr Arg Ala Trp 50 55 60

```
Lys Lys Leu Lys Thr Cys Tyr Pro Pro Ser Leu Leu His Pro Gly Thr
65
                     70
                                         75
<210> 1837
<211> 24
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1837
Gly Xaa Gly Arg Glu Arg Glu Arg Thr Ser Leu Val Phe Phe Phe
                                     10
Phe Phe Gly Xaa Lys Ile Xaa Phe
             20
<210> 1838
<211> 127
<212> PRT
<213> Homo sapiens
<220>
```

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (29)

<220> <221> SITE <222> (75)

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1838
His Glu Gly Glu Ile Ala Val Leu Ala Ser Gly Ala Arg Arg Leu Glu
                                     10
Leu Leu Arg Pro Arg Gly Asn Arg Ser Gly Thr Pro Xaa Gly Glu Glu
            20
Ala Ser Arg Ser Leu Arg Asp Thr Lys Ala Pro Ala Thr Arg Trp Leu
                             40
Gln Leu Gly Arg Gly Arg Gln Asp Asp Gly Ser Gly Phe Gly Ser Val
                        55
Thr Arg Arg Pro Glu Gly Ala Gly Pro Ala Xaa Ser Ala Arg Ala Pro
65
                    70
                                         75
Ala Leu Ala Asp Arg Asp Leu Arg Pro Xaa Met Gly Lys Lys Ala Glu
Ala Arg Ala Pro Ile Leu Phe Gly Glu Lys Gln Ala Ser Leu Xaa Ser
                               105
           100
Phe Gly Ile Arg Lys Phe Xaa Thr Trp Xaa Lys Trp Cys Val Val
                                                125
        115
                            120
```

<210> 1839 <211> 57

```
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1839
Ala Arg Ala Cys Ser Ser His Trp Cys Asp Ser Ser Ile Pro Phe Ala
                                     10
Arg Asn Gly Pro Gln Leu Leu Leu Arg His Trp Trp Leu Leu His Val
Arg Arg Leu Leu Gln Xaa Gln Arg Val Gln Met Xaa Leu Leu Gln Xaa
                             40
Glu Leu Leu Phe Leu Xaa Pro Arg Gly
     50
                         55
<210> 1840
<211> 33
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (18)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
Gln Gln His Arg Arg Gly Ser Arg Glu Xaa Pro Ala Leu Leu Ala Pro
                                     10
Arg Xaa Gly Ile Ser Phe Thr Lys Pro Thr Arg Leu Trp Xaa Pro Arg
                                 25
Xaa
<210> 1841
<211> 85
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (12)

Ala Arg Gly Gln Ser Ala Trp Xaa Thr Ala Leu Xaa Pro Trp Tyr Cys
1 5 10 15

<223> Xaa equals any of the naturally occurring L-amino acids

Met His Ala Met Leu Ala Ala Pro Phe Pro Ser Trp Ala Pro Arg Val 20 25 30

Ser Pro Asp Pro Gly Ser Gln Val Cys Ser His Leu His Leu Pro His 35 40 45

Ser Pro Pro Leu Pro Ser Ser Arg His Leu His Ala His Leu Val Leu 50 55 60

Ser His Arg Pro Gln Lys Gly Gly His Glu Gly Thr Ser Leu Ala Glu 65 70 75 80

Leu Gly Gly Ala Gly

<210> 1842

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1842

His Ala Thr Cys Asn Ser Leu His Asp Pro Phe Cys Ile Phe Lys Pro 1 5 10

Lys Leu Ser Ala Ser Val Ala Phe Gln Gly Asn Lys Glu Ser Asn Cys
20 25 30

Gly Leu Asp Phe Val Ser Phe Phe Gln Asn Leu Ser Phe Ile Gln Phe 35 40 45

Pro Ser Ile Ile Ile Tyr Phe Tyr Leu Glu Val Ser Lys Glu Val Phe 50 55 60

<210> 1843

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

```
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1843
Ser Trp Cys Phe Ser Glu Ile Ile Tyr Ile Phe Xaa Ser Gln Gly Leu
                                    10
Thr Val Ser Pro Arg Leu Glu Ala Glu Val Val Ala Arg Ala Glu Phe
                               25
            20
Asp Ile Lys Leu Ile Asp Thr Val Asp Leu Glu Xaa Gly Ala Arg Tyr
                             40
Pro Ile Arg Pro Ile Ser Xaa Xaa Val Leu Gln Phe Thr Gly Pro Ser
                        55
Phe Leu Lys Arg Gly Xaa Leu Gly Lys
                    70
65
<210> 1844
<211> 73
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
Arg Gly Arg Gly Trp Arg Xaa Val Leu Leu Gly Trp Glu Gly Thr Ser
                                     10
Pro Arg Thr Gln Xaa Gly Lys Gly Xaa Arg Pro Xaa Gly Glu Xaa Thr
Asp Met Ser Leu Glu Asp Pro Phe Phe Val Val Arg Gly Glu Val Gln
                                                45
        35
                            40
Lys Ala Val Asn Thr Gly Pro Arg Ala Val Pro Xaa Leu Val Arg Xaa
     50
Pro Ala Arg Xaa Xaa Gly Val Arg Asn
65 70 ...
```

<210> 1845 <211> 67 <212> PRT

<213> Homo sapiens

```
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Glu Gly Gln Ser Asn Leu Xaa Met Ser Gly Trp Phe Trp Thr Ala
                 5
                                    10
Thr Pro Ala Gly Xaa Xaa Pro Arg Ser Ser Cys Thr Thr Xaa Lys Val
Ala Ser Ser Pro Lys His Ser Phe Pro Leu Xaa Ser Pro Ser Asn Pro
         35
                             40
Glu Ala Leu Trp Cys Ala Leu Cys Pro Met His Ser His Leu Ser Xaa
    50
                         55
                                             60
Pro Pro Gly
65
<210> 1846
<211> 45
<212> PRT
```

```
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
Xaa Val Gln Thr Pro Ser Leu Leu Gly Thr Gly Val Arg Gly Arg Leu
Xaa Phe Val Glu Lys Pro Pro Val Lys Ala Ser Gly Gly Ser Pro Cys
                                 25
Cys Ile Val Cys Leu Leu Ser Phe Pro Leu Val Arg Arg
         35
                             40
<210> 1847
<211> 77
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

```
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1847
Glu Gln Xaa Lys Glu His Thr Arg Ile Cys Ser Lys Ile Xaa Gly Arg
Phe Xaa Gly Arg Gly Xaa Xaa Pro Thr Glu Pro Gly Asp Met Leu Xaa
            20
                               25
Val Gln Asp Lys Asn Xaa Arg Leu Thr Phe Lys Phe Gly His Arg Thr
        35
                40
                                           45
Leu Leu Asn Pro Xaa Gly Asn Leu Thr Gly Lys Pro Lys Glu Glu Gln
                        55
Val Phe Trp Thr Leu Gly Lys Lys Pro Xaa Xaa Xaa Glu
                    70
```

<210> 1848

```
<211> 31
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1848
Ala Arg Ala His Thr His Pro Arg Thr Gly Phe Val Lys Lys Lys
                                    10
Lys Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Xaa
            20
<210> 1849
<211> 58
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1849
Trp Pro Ala Val Thr Gly Phe Lys Thr Gly Leu Phe Leu Val Lys Met
                 5
                                    10
Gly Glu Leu Leu Ser Cys Gln Lys Cys Xaa Arg Ser Thr Trp Lys Thr
Lys Ser Ser Gln Arg Glu Ser Lys Glu His Leu Ile Ser Leu Ile Ser
                            40
Thr Cys Ser Tyr Phe Ser Lys Val Asn Ser
    50
                       55
```

```
<210> 1850
<211> 69
<212> PRT
<213> Homo sapiens
<400> 1850
Ala Ile His Leu Pro Thr Pro Leu Phe Phe Lys Thr Ser Phe Asn Ser
Leu Asn Lys Ile Gly Phe Val Phe Asn Phe Tyr Ser Leu Phe Ile Glu
                                 25
Ser Gln Leu Pro Leu Tyr Ile Ile Cys Tyr Trp Lys Arg Phe Leu Ser
                                                 45
         35
                             40
Asn Leu Gln Ser Leu Ile Val Pro His Arg Val Gly Gln Trp Leu Leu
                         55
Glu Leu Glu Gly Pro
65
<210> 1851
<211> 166
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (154)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1851
Met Trp Lys Val Asp Trp Asp Pro Val Val Ser His Pro Lys Pro Ala
Phe Arg Glu Gly Leu Gln Thr Gln Asn Val Asn Pro Ala Ser Pro Leu
                                 25
Ser Gln Asn Cys Gly Leu Val Pro Gly Arg Gly Gly Trp Gly Gly
                             40
                                                  45
Ala Gly Gly Lys Phe Arg Phe Trp Arg Ala Pro Cys Gly Asp Ala Pro
     50
                         55
Ser Cys Ala Leu Leu Phe Pro Arg Trp Ser Pro Arg Ser Pro Ser Gly
                     70
                                         75
Ser Ala Cys Pro Ala Leu Lys Arg His Pro Pro Phe His Pro Val Ser
                 85
                                     90
Gly Xaa Gly Cys Gly Ser Gly Arg His Ala Xaa Pro Xaa Cys Xaa Val
            100
                                105
```

Phe Glu Gln Ala Lys Ala Pro Thr Gly Xaa Gly Arg Ala Gly Val Lys 115 120 125

Thr Val Lys Trp Leu Xaa Leu Asn Ile Pro Leu Trp Arg Asn Phe Xaa 130 135 140

Arg Leu Val Lys Asn Phe 165

<210> 1852

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1852

Asp Pro Arg Val Arg Gly Ala Arg Ser Val Val Leu Leu Leu Val Ala 1 5 10 15

Val Arg Leu His Thr Leu Leu Ser Cys Pro Leu Glu Gln Pro Ala Gly
20 25 30

Thr Glu Trp Ile Leu Glu Glu Gly Val Thr Thr Gly Pro Pro Arg Lys
35 40 45

Pro Arg Ala Asp Ile Tyr Asn Leu Arg Ser Pro Asp Glu Phe Ile Val
50 55 60

Gly Gln Asn Gln Ala Leu Ile Glu Pro Gly
65 70

<210> 1853

<211> 100

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1853

His Arg Gly Glu Cys Phe Ser Cys Val Ala Pro Arg Ala Gln Ser Ser 1 5 10 15

Cys His Arg Arg His Pro Gly Phe Gly Gly Ala Gly Leu Gln Ala Pro 20 25 30

Gly Arg Arg Thr Pro Arg Ala Thr Lys Ser Ser Leu Glu Xaa Xaa Ala 35 40 45

Ser Tyr Ala Gly Gly Arg Gly Gly Gly Pro Asp Phe Gly Ser Arg Gly 50 55 60

Leu Thr Gly Leu Val Arg Pro Val Trp Leu Leu Trp Lys Gln Cys
65 70 75 80

Cys Xaa Leu Leu Glu Asp Lys Arg Glu Ser Lys Pro Leu Val Gly Glu 85 90 95

Ile Trp Leu Arg 100

<210> 1854

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1854
Arg Xaa Ala Gly Ala Gly Gly Pro Val Arg Gly Leu Leu Val Gly Leu
                                   10
Val Arg Gln Gln Arg Leu Arg Leu Arg Ser Gly Ala Gln Gln Pro His
            20
His Ala Ala Arg His Pro Asp Pro Gln Leu Cys Arg Arg Gly Arg Arg
                            40
Arg Leu Leu Pro Gln Ser Ala Ala Ala Ala Ala Gly Pro Gly Ala
                        55
Pro Arq Ala Ala Pro Ala Pro Pro Ser Ala Thr Leu Pro Ala Gly Ala
                    70
65
Ala Ala Pro Pro Ser Pro Pro Phe Ser Phe Xaa Leu Pro Arg Arg Pro
                85
                                    90
Cys Pro Xaa Arg Pro Cys Xaa Xaa Ala Ala Pro Lys Xaa Pro Gly Ile
                              105
Arg Cys Ser Glu Arg Glu Ser Asn Leu Xaa Arg Val Pro
                                               125
                          120
       115
```

<210> 1855 <211> 85

<212> PRT

<213> Homo sapiens

```
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1855
Val Gly Ser Ala Cys Leu Leu Asn Trp Tyr Gln Pro Leu Pro Leu Pro
Ser Lys Phe Leu Val Pro Pro Leu Arg Asn Ser Arg Ile Val Leu Gln
                                 25
Ile Asp Asn Ala Arg Xaa Ala Ala Asp Glu Leu Pro Asn Gln Val Ser
                             40
Xaa Ser Xaa Leu Gly Ala Ala Glu Ala Arg Thr Gly Val Gly
     50
Gly Phe Arg Asn Xaa Pro Ser Pro Ser Leu Asp Gly Leu Lys Leu Asn
Pro Pro Met Asp Ser
                 85
```

```
<210> 1856
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>

```
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1856
Tyr Gln Gln Ile Thr Ser Ser Arg Leu Ser Ile Gln Leu Ile Leu
                                     10
Ile Ser Xaa Asp Xaa Asn Val Thr Gln Xaa Leu Leu Ile Ala Pro Asn
                                 25
Lys Xaa Val Ser Val Xaa Pro Leu Pro Ser Glu Leu
                            40
<210> 1857
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1857
Ser Thr His Ala Ser Gly Phe Ser Ala Pro Ser Arg Ile Ser Ala Trp
                  5
                                     10
Phe Gly Pro Pro Ala Ser Xaa Pro Ala Ser Xaa Met Ser Ile Xaa Xaa
                                 25
             20
Thr Gln Lys Ser Tyr Lys Xaa Ser Xaa Ser Gly Pro Arg Gly Phe Ser
                             40
Ser Arg Ser Tyr Thr Ser Gly Xaa Gly Ser Arg Ile Ser Ser Ser Xaa
                                             60
     50
                         55
Phe Ser Arg Val Gly Ser Ser Asn Phe Arg Gly Gly
                     70
 65
```

<210> 1858

<211> 83

<212> PRT

<213> Homo sapiens

<220>

```
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1858
Arg Leu Arg Thr Lys Thr Cys Thr Trp Ser Phe Pro Gly Ala Leu Cys
                                    10
Val Val Glu Leu Arg Trp Asn Phe Gly Ala Leu Gly Cys Gln Arg Ala
             20
Cys Leu Val Ala Thr Glu Thr Ser Pro Ala Arg Leu Arg Gly His Phe
Ile Thr Ile Gln Lys Cys Leu Pro Leu Lys Ala Ser Val Val Val Phe
                        55
Lys Pro Gln Lys Ser His Xaa Gln Asp His Xaa Thr Thr Thr Leu Thr
65
                     70
                                        75
Ser Val Pro
<210> 1859
<211> 58
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>

<221> SITE

```
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1859
Lys Ser Ser Pro Gly Lys Met Gly Leu Xaa Glu Xaa Ala Thr Gly Thr
                                                          15
                                     10
 1
                  5
Ala Ser Cys Arg Trp Ser Trp Pro Xaa Ser His Arg Pro Val Tyr Lys
                                 25
Xaa Cys Ala Ser Trp Thr Leu Xaa Ser Gly Thr Gly Ser Trp Thr Leu
Lys Ser Leu Val Pro Pro Ala Arg Xaa Trp
     50
                         55
<210> 1860
<211> 61
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1860
Gln Asp Gln Ser Cys Arg Lys Met Asp Ser Glu Val Gln Arg Asp Gly
```

1 5 10 15

Arg Ile Leu Asp Leu Ile Asp Asp Ala Trp Arg Glu Asp Lys Leu Pro 20 25 30

Tyr Glu Asp Val Ala Ile Pro Leu Asn Glu Leu Pro Xaa Pro Xaa Gln 35 40 45

Asp Asn Gly Gly Thr Thr Asp Leu Ser Lys Xaa Lys Lys 50 55 60

<210> 1861

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1861

Ser Arg Gly Ala Pro Phe Phe Lys Pro Val Arg Lys Ala Gln Tyr Ser 1 5 10 15

Gly Gly Ser Asp Pro Ile Phe Gln Val Arg Pro Ser Pro Leu Ser Leu 20 25 30

Thr Arg Lys Gly Asn Ser Leu Thr Pro Cys Ala Ser Gln Val Arg Gln 35 40 45

Cys Ser Pro Cys Phe Gly Ser His Thr Val Arg Ala Xaa Thr Asp Leu 50 55 60

Cys Pro Leu Ser Gly Thr Pro 65 70

<210> 1862

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1862

Thr Pro Thr Pro Phe Gly Ser Ala Arg Ala Pro Gln Ala Arg Pro Gly
1 5 10 15

Arg Arg Asp Gly Arg Met Ser Gly Gly Arg Arg Lys Glu Glu Pro Pro 20 25 30

Gln Pro Gln Leu Ala Asn Gly Ala Leu Lys Val Ser Val Trp Ser Lys 35 40 45

Val Leu Arg Thr Thr Arg Pro Gly Xaa Ile Arg
50 55

<210> 1863

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1863

Gln Leu Ser Thr Leu Ile Asn Trp Leu Gln Ser Thr Ser Pro Ala Ala 1 5 10 15

Gly Lys Lys Gly Gly Arg Ser Pro Gly Arg Phe Glu Ala Ala Ser Ser 20 25 30

Asn Leu Gln Phe Asn Met Lys Ile Thr Ser Glu Leu Val Lys Arg Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Thr Pro Val Phe Arg Phe Thr Val Gln Cys Phe Thr Gln Pro Phe 50 60

Tyr Leu Thr Pro Lys Lys Lys Lys Lys Lys Lys Asn Xaa Gly Gly 65 70 75 80

Pro Gly Xaa

<210> 1864

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1864

Glu Gln Leu Lys Glu His Thr Arg Leu Cys Ser Lys Ile Val Gly Arg
1 5 10 15

Phe Ile Gly Arg Gly Asp Lys Pro Thr Glu Pro Gly Asp Ser Trp Leu 20 25 30

Ser Lys Ile Glu Ser 35

<210> 1865

<211> 41

<212> PRT

<213> Homo sapiens

<400> 1865

Glu Gln Leu Lys Glu His Thr Arg Leu Cys Ser Lys Ile Val Gly Arg
1 5 10 15

Phe Ile Gly Arg Gly Asp Lys Pro Thr Glu Pro Gly Asp Ser Trp Leu 20 25 30

Ser Lys Ile Glu Ser Leu Val Gln Leu 35 40

<210> 1866

<211> 33

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1866

Asn Thr Glu Leu Thr Ile Asn Ser Pro Ile Ser Thr Ile Asn Gln Gln 1 5 10 15

Val Ile Ile Thr Leu Thr Val Asn Pro Thr Lys Lys Lys Lys Xaa 20 25 30

Lys

<210> 1867

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1867

Gly Ser Gly Gly Lys Met Glu Asp His Gln His Val Pro Ile Asp Ile
1 5 10 15

Gln Thr Ser Lys Leu Leu Asp Trp Leu Val Asp Arg Arg His Cys Ser 20 25 30

Leu Lys Trp Gln Ser Leu Val Leu Thr Ile Arg Glu Lys Ile Asn Ala 35 40 45

Ala Ile Gln Asp Met Pro Glu Ser Glu Glu Ile Ala Gln Leu Leu Ser 50 55 60

Gly Ser Tyr Ile His Tyr Phe His Cys Leu Arg Ile Leu Asp Leu Leu 65 70 75 80

Lys Gly Thr Glu Ala Ser Thr Lys Asn Ile Phe Gly Arg Tyr Ser Ser 85 90 95

Gln Arg Met Lys Asp Trp Gln Glu Ile Ile Ala Leu Tyr Glu Lys Asp 100 105 110

Asn Thr Tyr Leu Val Glu Leu Ser Ser Leu Leu Val Arg Asn Val Asn 115 120 125

Tyr Glu Ile Pro Ser Leu Lys Lys Gln Ile Ala Lys Cys Gln Gln 130 135 140

<210> 1868

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1868

Glu Gln Leu Lys Glu His Thr Arg Leu Cys Ser Lys Ile Val Gly Arg
1 5 10 15

.

Phe Ile Gly Arg Gly Asp Lys Pro Thr Glu Pro Gly Asp Ser Trp Leu 20 25 30 Ser Lys Ile Val Ser 35

<210> 1869

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1869

Ile Leu Gln Ala Val Arg Thr Glu Trp Tyr Ile Val Val Phe Leu Asn
1 5 10 15

Ile Ser Glu Pro Arg Lys Gly Thr Val Glu Ile Arg Tyr Tyr Asn Leu 20 25 30

Met Gly Pro Leu Ser Val Cys Gly Leu Leu Leu Thr Glu Met Leu Cys 35 40 45

Ser Thr Trp Ala Ala Met Arg Leu Pro 50 55

<210> 1870

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1870

Val Pro His Ser Glu Leu Leu Gln Pro Ala Ser Arg Ile Cys Ser Met
1 5 10 15

Ser Arg Arg Ser Gln Ser Leu Ala Ala Ser Ser Val Pro Gly Glu Arg 20 25 30

Cys Leu Glu Leu Ser Ser Gln Gly Val Met Ser Ala Ser Arg Val Cys
35 40 45

Met Gly Ala Glu Gly Thr Leu Leu Leu Pro Pro Trp Ser Gly Asn 50 55 60

<210> 1871

<211> 70

<212> PRT

<213> Homo sapiens

```
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1871
Thr Trp Cys His Glu Val Gly Glu Leu Gly Glu Leu Ser His Ser Ser
                                    10
Tyr Arg Xaa Ala Phe Leu Lys Cys Pro Leu Thr Ser Arg Phe Cys Ser
             20
Arg Ser Ser Phe Ser Glu Leu Lys Val Ile Phe Ile Tyr Val Trp Gly
                             40
         35
Lys Ile Asn Ser Ser Ser Lys Arg Ile Leu Ile Arg Leu Xaa Xaa Leu
                        55
Leu Lys Thr Xaa Pro Asn
 65
<210> 1872
<211> 47
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1872
Glu Thr Trp His Leu Asn His Ile Leu Ser Leu Gly Lys Ser Phe Gly
                                                          15
                 5
                                    10
```

Leu Cys Ser Cys Phe Val Cys Phe Thr Cys Phe Pro Pro Ser Pro Lys 20 25 30

Pro Phe Val Leu Ser Val Lys Leu Thr Phe Pro Phe Xaa Phe Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

<210> 1873

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1873

Lys Thr Leu Leu Trp Asn Met Lys Leu Cys Val Arg Trp Arg Asp 1 5 10 15

Pro Leu Asn Leu Arg Ala Leu Asn Ser Pro Glu Ser Thr Leu Gly Arg
20 25 30

Phe Ala Met Glu Leu Lys Leu Glu Val Ile Phe Leu Gly Ala Leu Glu 35 40 45

Ser Phe Leu Gly Thr Gln Asn Tyr Gln Lys Ser Gly Thr Val Arg Arg 50 55 60

Lys Ser Val Cys Lys Thr Gly Phe Leu Glu Val 65 70 75

<210> 1874

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1874

Ile Asn Asn Ile Ser Arg Gln Ile Tyr Leu Thr Asp Asn Pro Glu Ala 1 5 10 15

Val Ala Ile Lys Leu Asn Gln Thr Ala Leu Gln Ala Val Thr Pro Ile 20 25 30

Thr Ser Phe Gly Lys Lys Gln Glu Ser Ser Cys Pro Ser Gln Asn Leu 35 40 45

Lys Asn Ser Glu Met Glu Asn Glu Asn Asp Lys Ile Val Pro Lys Ala 50 55 60

Thr Ala Ser Leu Pro Glu Ala Glu Glu Leu Ile Ala Pro Gly Thr Pro

65 70 75 80

Ile Gln Phe Asp Ile Val Leu Pro Ala Thr Glu Phe Leu Asp Gln Asn 85 90 95

Arg Gly Ser Arg Arg Thr Asn Pro Phe Gly Glu 100 105

<210> 1875

<211> 84

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1875

Gly Glu Glu Ala Cys Phe Ala Val Gly Ser Leu Val Leu Ala Arg Ser
1 5 10 15

Leu Arg Val Cys Thr Gly Gly Thr Leu Pro Leu Pro Ala Pro Phe Leu
20 25 30

Xaa Xaa Pro Val Gly Asn Ile His Leu Phe Met Pro Val Cys Cys Met 35 40 45

Gln Ala Phe Trp Leu Pro Thr Leu Gln Gln Asn Glu Leu His Gln Leu 50 55 60

Leu Ser Ala Asp Ser Ala His Arg Glu Ser Trp Ser His Ser Leu Phe 65 70 75 80

Cys Phe Ala Leu

<210> 1876

<211> 65

<212> PRT

<213> Homo sapiens

```
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1876
Gln Trp Gly Phe Val Xaa Asp Lys Met Ala Met Ala Gly Arg Val Xaa
                                     10
Pro Pro Ser Tyr Asp Glu Arg Pro Phe His Arg Pro Val Thr Glu Leu
             20
                                 25
Arg Glu Asp Lys Xaa Ser Glu Xaa Xaa Gly Pro Ala Ser Leu Leu Leu
Thr Arg Pro Val Pro Lys Lys Tyr Val Phe Gln Asn Ala Leu Asn Leu
                         55
Asn
 65
<210> 1877
<211> 58
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
```

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1877
Arg Ala Pro Pro Gly Gln Xaa Gly Gly Asp His Gln Asp Phe Ile Gln
Gly Gly Arg Asp Gln Glu Ile Lys Pro Pro Thr Leu Ser Val His Thr
             20
                                 25
                                                      30
Gly Leu Cys Asp Tyr Ile Asp Gln Pro Leu Lys Ile Lys Gln Xaa Leu
                             40
         35
Ile Cys Xaa Xaa Asp Lys Xaa Lys Ile Ser
     50
                         55
<210> 1878
<211> 45
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1878

Ala Leu Asp Trp Leu Pro Glu Gly Leu Val Lys Ile His Ser His Pro 1 5 10 15

Ala Gly Ser Gly Ser Asn Arg Gly Phe His Ser Phe Ile Ser Xaa Leu 20 25 30

Ala Asp Lys Asp Pro Gly Xaa His Val Leu Leu Ile Xaa 35 40 45

<210> 1879

<211> 54

<212> PRT

<213> Homo sapiens

<400> 1879

-Val Lys Met Ile Ile Gly Pro Lys Leu Thr Ala Leu Pro Lys Arg Gln
1 5 10 15

Arg Ser Gln Asp Ile Gly Arg Ser Gly Ala Ala Leu Glu Thr Leu Lys
20 25 30

Phe Thr Ser Met Arg Gly Leu Glu Cys Ser Leu Gly Arg Arg Ala Ser 35 40 45

Thr Cys Ser Pro Gly Pro 50

<210> 1880

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1880

Ser Ala Cys Gly Ser Pro Gly Gly Asn Phe Pro Ser Pro Arg Gly Gly
1 5 10 15

Ser Gly Val Ala Ser Met Glu Arg Ala Glu Ser Ser Ser Thr Glu Pro 20 25 30

Ala Lys Ala Ile Lys Pro Ile Asp Gln Lys Ser Val His Gln Ile Cys

```
40
                                                 45
         35
Ser Gly Gln Val Val Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Val
     50
                        55
Glu Asn Ser Leu Asp Ala Gly Ala Thr Asn Ile Asp Leu
                    70
<210> 1881
<211> 733
<212> DNA
<213> Homo sapiens
<400> 1881
gggateegga geccaaatet tetgacaaaa eteacacatg eccaeegtge ecageacetg 60
aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120
teteceggae teetgaggte acatgegtgg tggtggaegt aagceacgaa gaccetgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cacgcagaag agectetece tgteteeggg taaatgagtg cgacggeege 720
gactctagag gat
<210> 1882
<211> 5
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1882
Trp Ser Xaa Trp Ser
  1
<210> 1883
<211> 86
<212> DNA
<213> Homo sapiens
```

<400> 1883						
gcgcctcgag	atttccccga	aatctagatt	tccccgaaat	gatttccccg	aaatgatttc	60
	ctgccatctc					86
<210> 1884						
<211> 27						
<212> DNA						
<213> Homo	sapiens					
<400> 1884						
gcggcaagct	ttttgcaaag	cctaggc				27
<210> 1885						
<211> 271						
<212> DNA						
<213> Homo	sapiens					
<400> 1885			×.			
ctcgagattt	ccccgaaatc	tagatttccc	cgaaatgatt	tccccgaaat	gatttccccg	60
aaatatctgc	catctcaatt	agtcagcaac	catagtcccg	cccctaactc	cgcccatccc	120
gcccctaact	ccgcccagtt	ccgcccattc	tccgccccat	ggctgactaa	tttttttat	180
ttatgcagag	gccgaggccg	cctcggcctc	tgagctattc	cagaagtagt	gaggaggctt	240
		gcaaaaagct				271
<210> 1886						
<211> 32						
<212> DNA						
<213> Homo	sapiens					
<400> 1886						
gcgctcgagg	gatgacagcg	atagaacccc	gg			32
<210> 1887						
<211> 31						
<212> DNA						
<213> Homo	sapiens					
<400> 1887		•				
gcgaagcttc	gcgactcccc	ggatccgcct	С			31
<210> 1888						
<211> 12						
<212> DNA						

<213> Homo sapiens

<400> 1888 ggggactttc	cc					12
<210> 1889 <211> 73 <212> DNA <213> Homo	sapiens					
<400> 1889 gcggcctcga ccatctcaat		ccggggactt	tccggggact	ttccgggact	ttccatcctg	60 73
<210> 1890 <211> 256 <212> DNA <213> Homo	sapiens					
caattagtca cagttccgcc	gcaaccatag cattctccgc gcctctgagc	tcccgcccct cccatggctg	aactccgccc actaattttt	ggactttcca atcccgcccc tttatttatg ggcttttttg	cagaggccga	180

International application No. PCT/US00/05988

	SSIFICATION OF SUBJECT MATTER	•		
IPC(7)	Please See Extra Sheet. 536/23.1; 435/320.1, 325, 455, 68.1; 530/300, 350			
OS CL :	o International Patent Classification (IPC) or to both na	tional classification and IPC		
	DS SEARCHED			
	ocumentation searched (classification system followed b	by classification symbols)		
	536/23.1; 435/320.1, 325, 455, 68.1; 530/300, 350			
Documentat	ion searched other than minimum documentation to the e	xtent that such documents are included	in the fields searched	
	ata base consulted during the international search (nam	e of data base and, where practicable	, search terms used)	
BIOSIS, N	MEDLINE, CAPLUS, BIOTECHDS, EMBASE, SEQ S ancer, carcinoma, protein, peptide, gene, dna, transfect	caron		
prostate, c	ancer, caremonia, protein, populos, gare, etc.,			
c. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appr	opriate, of the relevant passages	Relevant to claim No.	
x	SCHAAPVELD et al. The Mouse Gene Ptprf Encoding the Leukocyte Common Antigen-Related Molecule LAR: Cloning,			
	Characterization, and Chromosomal Loca	alization. Genomics. 01 May		
	1995, Vol. 27, No. 1, pages 124-130, s	see entire document.		
	1995, voi. 27, No. 1, pages 12 1 11 17		·	
x	DE PLAEN et al. Structure, chron	nosomal localization, and	1-4 and 21	
^	expression of 12 genes of the MAGI	E family. Immunogenetics.		
	September 1994, Vol. 40, pages 360-36	59, especially page 363 and	Ì	
	entire document.			
			ļ	
			ŀ	
			<u> </u>	
X Fur	ther documents are listed in the continuation of Box C.	See patent family annex.		
	Special categories of cited documents:	"T" later document published after the it date and not in conflict with the ap	nternational filing date or priority uplication but cited to understand	
A 0	iocument defining the general state of the art which is not considered	the principle or theory underlying	he invention	
t	o be of particular relevance	"X" document of particular relevance;	the claimed invention cannot be dered to involve an inventive step	
	earlier document published on or after the international filing date document which may throw doubts on priority claum(s) or which is document which may throw doubts on priority claum(s) or which is			
۱ (socument which may the publication date of another citation or other special reason (as specified)	 Y document of particular relevance; considered to involve an inventi 	ve ated when the document is	
•••	document referring to an oral disclosure, use, exhibition or other means	combined with one or more other a being obvious to a person skilled a	uch documents, such combination	
. _p .	document published prior to the international filing date but later than -g. document member of the same patent family			
	the priority date claimed actual completion of the international search	Date of mailing of the international s	search report	
15 MA		05JUL 2000		
		Authorized officer	JOYCE BRIDGERS	
Commis	nailing address of the ISA/US sioner of Patents and Trademarks		PARALEGAL SPECIALIST	
Box PC		JOHN BRUSCA	CHEMICAL MATRIX	
1	(703) 206 2220	Telephone No. (703) 308-0196	AUB TO	

International application No.
PCT/US00/05988

C (Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*			Relevant to claim No.
х	ADAMS et al. Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence. Nature. 28 September 1995, Vol. 377, Supp., pages 3-17, see entire document.		1-4 and 21
x	HILLIER et al. Generation and analysis of 280,000 hur expressed sequence tags. Genome Research. 1996, Vol. pages 807-828, see entire document.	man 6, No. 9,	1-4 and 21
х	KOHFELDT et al. Nidogen-2: A new basement membrane protein with diverse binding properties. J. Mol. Biol. 1998, Vol. 282, No. 1, pages 99-109, see entire document.		1-4 and 21

International application No. PCT/US00/05988

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)				
This international report has not been established in respect of certain claims under Article 17(2Xa) for the following reasons:				
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:				
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:				
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).				
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)				
This International Searching Authority found multiple inventions in this international application, as follows:				
Please See Extra Sheet.				
·				
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.				
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.				
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:				
4. X No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-12, 14-16, 21 and SEQ ID NOS: 1-10				
Remark on Protest The additional search fees were accompanied by the applicant's protest.				
Remark on Protest No protest accompanied the payment of additional search fees.				

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)≠

International application No. PCT/US00/05988

A. CLASSIFICATION OF SUBJECT MATTER: IPC (7):

C07H 21/04; C12N 15/63, 15/85, 15/09; C07K 5/00, 14/00; C12P 21/00

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s)I-12, 14, 15, 16 and 21, drawn to cDNA, polypeptides, genes, a method of using the cDNA to make host cells comprising the cDNA, and a method of making the polypeptide.

Group II, claim(s) 13, drawn to an antibody specific for the polypeptides of Group I.

Group III, claim(s) 17, drawn to a therapeutic method of using the cDNA or the polypeptide of Group I.

Group IV, claim(s)18 and 19, drawn to a diagnostic method of using the cDNA or polypeptide of Group I.

Group V, claim(s) 20, drawn to a method of using the polypeptide of Group I to isolate a binding partner.

Group VI, claim(s) 22, drawn to a method of using the cDNA of Group I to identify the activity of the polypeptide encoded by the cDNA.

Group VII, claim 23, drawn to the binding partner made by the method of Group V.

The inventions listed as Groups I-VII do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: PCT Rule 13.1 and Annex B do not provide for unity of invention between two or more different products or methods of use that share a special technical feature.

In addition, each Group detailed above reads on distinct Groups drawn to multiple SEQ ID Numbers. The sequences are distinct because they are unrelated sequences, and a further lack of unity is applied to each Group. The lack of unity is partially waived and the Applicant(s) must further elect up to 10 SEQ ID Numbers for examination in the elected Group detailed above.